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*QUAESTIONES* CONCERNING CHRIST  
FROM THE FIRST HALF OF THE THIRTEENTH CENTURY:

VI. *QUAESTIONES* FROM DOUAI MS. 434:  
SAVING ACTIVITIES OF CHRIST\*

*Walter H. Principe, C.S.B.*

UNDER the general rubric of "Saving Activities of Christ" we group a final set of eight questions from manuscript 434 of the Bibliothèque de la Ville at Douai that deal in whole or in part with questions about Christ.<sup>1</sup> Of these eight questions, only three ask directly about Christ; the other five include considerations of Christ within their more general topics. Four of the questions discuss the resurrection; three deal with prayer; one examines the miracles of Christ and others. We shall again use the numbering of the questions given by Palémon Glorieux in his description of the Douai manuscript,<sup>2</sup> but we shall follow a logical rather than numerical sequence,

\* Research for this series and for other studies was made possible by Leave Fellowships from the Social Sciences and Humanities Research Council of Canada and by a Theological Scholarship and Research Grant from The Association of Theological Schools in the United States and Canada. I should like to express my gratitude to the Council and the Association for this help.

<sup>1</sup> The previous articles in this series are found in *Mediaeval Studies* 39 (1977): 1-59 (*quaestiones* from Paris, Bibliothèque Nationale lat. 3454, 3549, 3572, 3804A, 15571); 42 (1980): 1-40 (*quaestiones* from Douai, Bibliothèque de la Ville 434, on the need of the Incarnation and the defects assumed); 43 (1981): 1-57 (*quaestiones* from Douai 434, on the Hypostatic Union); 44 (1982): 1-82 (*quaestiones* from Douai 434, on Christ as Head of the Church and on the unity of the Mystical Body); and 50 (1988): 1-45 (*quaestiones* from Douai 434, on Christ's knowledge).

<sup>2</sup> See his "Les 572 Questions du manuscrit de Douai 434," *Recherches de théologie ancienne et médiévale* 10 (1938): 123-52, 225-67. Besides the questions concerning Christ edited from Douai 434 in this series, we recall the editions of questions 141 (with its second redaction, q. 450), 143, and 145, all by Philip the Chancellor, in our *The Theology of the Hypostatic Union in the Early Thirteenth Century*, vol. 4: *Philip the Chancellor's Theology of the Hypostatic Union*, Studies and Texts 32 (Toronto, 1975), 158-88.

The role of Christ in the Beatific Vision forms part of the anonymous question 9 (with its second redaction, q. 531) of the Douai manuscript (vol. 1, fols. 9ra-10ra, and vol. 2, fols. 174va-176va, or 350a-354a according to Glorieux's alternate numbering at this point); this entire question has already been edited by the late regretted H.-F. Dondaine in his article, "L'objet et le 'medium' de la vision béatifique chez les théologiens du XIII<sup>e</sup> siècle,"



first examining questions about the earthly life of Christ (his miracles and prayer), then discussions of his resurrection and that of others, and finally, within a general question on prayer, those sections within this topic that ask about prayer to the heavenly Christ.

# I. THE *QUAESTIONES* EDITED AND ANALYZED HERE

## *Question 1 (no. 240a) (Anonymous)*

This question, which asks whether Christ as man could perform miracles, is found in volume 1, fol. 104va, lines 3-30 of the manuscript. It is not listed by Glorieux, and it comes between his number 240 and 241: hence we number it 240a.<sup>3</sup> The manuscript is written in the hand classified by Glorieux as *m*, the hand of the person who organized and ordered the manuscript.<sup>4</sup> The entire question is edited here.

## *Question 2 (2 redactions, nos. 316 and 401) (Peter de Bar)*

The first redaction, titled "On prayer" (A in our edition) is found in volume 1, fols. 133va-135ra; the second redaction (B in our edition), which states that it is "On prayer, according to Master Peter de Bar," is located in volume 2, fols. 55rb-56ra.<sup>5</sup> Redaction A is written by hand *m* and Redaction B in hand *m*<sup>8</sup> of Glorieux's classification of hands.<sup>6</sup> In this case, somewhat exceptionally, the redaction by hand *m* in Redaction A is more complete than that of Redaction B.

Since we are concerned with discussions about Christ, we edit only the first sub-question (fol. 133va-vb in A; fol. 55rb-va in B). This sub-question deals at some length with the nature of prayer and then asks about the prayer of Christ. The rest of the question goes on to provide detailed treatment of other problems concerning prayer.

*Recherches de théologie ancienne et médiévale* 19 (1952): 60-92; for the edition, see pp. 106-17, and for the sixth section, which is on Christ ("An omnia in Christo uidebuntur?"), see pp. 114-17.

<sup>3</sup> See Glorieux, "Les 572 Questions," 145.

<sup>4</sup> On hand *m* as that of the organizer of the manuscript, see *ibid.*, 151-52. As is often the case with hand *m*'s exposition, this question is brief, sketchy, and in this case incomplete. On the characteristics of this organizer's work, see *ibid.*, 251.

<sup>5</sup> See *ibid.*, 150 and 231. Glorieux was unaware that our Redaction A (q. 316) is by Peter de Bar; see his list of Peter's questions on p. 258, where, however, he rightly conjectures that other questions than those he lists may be by this master.

<sup>6</sup> See *ibid.*, 151 and 231 n. 38.

*Question 3 (no. 414) (Anonymous)*

This question on prayer, found in volume 2, fols. 65vb-66va, is written in hand *m*<sup>8</sup>. Glorieux lists it as anonymous.<sup>7</sup> Like the previous question, it discusses many aspects of prayer and mentions Christ's prayer only briefly; it also adds three paragraphs on formulas of prayer to Christ, a discussion similar to one we shall find at somewhat greater length in our question 8. Again we isolate for edition only the few paragraphs concerning Christ. The line numbers of these paragraphs are indicated in the edition.

*Question 4 (no. 80) (Anonymous)*

This anonymous question about proof of Christ's resurrection is found in volume 1, fol. 62vb. It is written by hand *m* and is one of a series of very short, rather incomplete questions in this hand at this point.<sup>8</sup> The entire question is edited here.

*Question 5 (no. 562) (Anonymous)*

This somewhat longer question about Christ's appearances after his resurrection and before his ascension is found in volume 2, fols. 202vb-203va (406b-408a in Glorieux's alternate numbering). It is written in hand *m*<sup>10</sup> of Glorieux's classification, and is listed by him as anonymous.<sup>9</sup> Our edition gives the complete question.

*Question 6 (2 redactions, nos. 188 and 552) (G?)*

This question, titled "On the general resurrection," is interesting for our purposes because it discusses the causality of Christ's resurrection in relation to that of others. Number 188 (our Redaction B) is contained in volume 1, fol. 95ra-rb, and number 552 (our Redaction A) is found in volume 2, fol. 190ra-va. Number 188 attributes it to the "enigmatic personage" G; this redaction is written in hand *m*. It adds a few paragraphs not found in number 552, which is written in hand *m*<sup>10</sup> and has no attribution.<sup>10</sup> The complete text of both redactions is edited here.

<sup>7</sup> Ibid., 265.

<sup>8</sup> On the hand, see *ibid.*, 151; it is listed as anonymous, *ibid.*, 264.

<sup>9</sup> On the hand, see *ibid.*, 244-45 n. 48; for its anonymity, see *ibid.*, 265.

<sup>10</sup> On the hands, see *ibid.*, 151 and 244-45 n. 48; on G, see *ibid.*, 159, and on the attribution of both redactions to G, *ibid.*, 264 and 265. G may in fact be the compiler of the manuscript and the one who writes in hand *m*. If this is the case, it may be that question 552 is by

*Question 7 (no. 187) (G)*

This short question about the state of those who rose with Christ naturally includes discussions of Christ. It is found in volume 1, fols. 94vb-95ra, is written in hand *m*, and is attributed to G by the manuscript.<sup>11</sup> Our edition of the passages concerning Christ is based on folio 95ra, lines 10-18 and 24-38.

*Question 8 (no. 243) (G)*

This rather lengthy question on prayer is found in volume 1, fols. 104va-105ra. It is also written in hand *m* and is attributed by the manuscript to G.<sup>12</sup> It is composed of a number of very short questions and answers on many aspects of prayer. Among them occur questions about prayer to Christ or to the "whole Trinity." We place this question last because it is concerned more with prayer to Christ after his ascension to heaven than with his earthly life. Since the question as a whole wanders through many disconnected topics, only those questions relating to Christ and the persons of the Trinity are edited here. The lines of the text given here are indicated in our edition.

This survey of the questions or parts of questions edited here shows that four are anonymous, one (in two redactions) is by Peter de Bar, and two or possibly three are by Master G, who may be the compiler of the manuscript.

## II. ANALYSIS AND INTERPRETATION OF THE CONTENTS OF THE QUESTIONS

The preceding description of these questions or parts of questions should already make it clear that the materials edited here lack any coherent unity. Their one focus is their link to various aspects of Christ's saving work, especially his prayer and his resurrection. None is developed as fully as the questions seen in our previous articles. Nevertheless they do introduce us to further aspects of the theology of the first part of the thirteenth century that have not been seen previously, and they can provide points of comparison with similar discussions in commentaries on the *Sentences*, *summae*, or other disputed questions of the period. For this reason, and

someone else and question 188 is G's transcription and edition. Hence our question mark concerning the authorship.

<sup>11</sup> See *ibid.*, 151, for the hand, and 142 and 264, for the authorship.

<sup>12</sup> See *ibid.*, 151, for the hand, and 145 and 264, for the authorship.

to give a complete picture of the Christology found in the Douai manuscript, we have thought it useful to edit these materials.

*Question 1 (no. 240a): Whether Christ as man could perform miracles*  
(Anonymous)

To this question a series of short affirmative arguments is given. If natural things like herbs and stones can exercise great powers, so much the more could Christ as man (1). Christ as man could cleanse (from sin) and give grace, and also as man he knew all things: since these are signs of divine majesty, he should be able to do all things as man (2). If the flesh of Christ (in the Eucharist) gives life and grace and increases grace, Christ as man should be able to do the same (3). The sacraments of the New Law effect what they signify, and therefore give grace. So also should Christ as man be able to do this (4).

These arguments all apply to Christ, and some seem to equate the giving of life and grace with the performing of miracles. The next two arguments turn to the apostles and to the sacraments. Since the apostles cast out demons and raised the dead, they were therefore also able to give grace (5). Circumcision and the sacraments of the Old Law did not effect what they signified, whereas Baptism and the other sacraments of the New Law do so; otherwise there would be no difference between them (6). In these arguments the principles first applied to Christ seem to be extended to the apostles and to the sacraments of the New Law. Perhaps these arguments mean to argue *a fortiori* concerning Christ as man: this was the method in the third and fourth arguments about Christ.

Miracles and works of power (*virtutes*) now return to the centre of discussion, but this time in their relation to faith. Why, it is asked, are miracles attributed to faith rather than to charity? Authoritative texts say that all things are possible to charity and that there is nothing charity cannot do (7); moreover, charity is perfective of the other virtues (8).

Contrary arguments insist that miracles should be attributed to faith since through faith we become children of God and are regenerated (9). Two authoritative texts support this: the letter to the Hebrews says that "the saints conquered kingdoms through faith" (10), and Paul attributes the greatest of miracles, moving mountains, to faith rather than charity (11).

The master's reply is now given: since we are regenerated through faith, miracles should be attributed to faith. Also, miracles are performed to exercise faith in such a way that there would be conformity between the faith of the one receiving the miracle and the one performing it (12).

Finally, it is asked whether performing miracles is a special gift given to those who are good. A Pauline text that lists the working of miracles among the gifts of the Spirit would seem to indicate that the working of miracles comes from grace and is a special gift (13). Moreover, if prophecy is a gift, so should the working of miracles be a gift (14). But to this the master replies that a gift, being voluntary, can be exercised by the recipient whenever such a person wishes. This would mean that the person could work miracles at will (15); although it is not stated explicitly, in the mind of the master such a working at will of miracles would seem impossible or at least unfitting. With this reply the short question ends.

In some arguments the power of performing miracles seems to be equated with the power to confer grace, but in others it seems to be distinguished from the conferment of grace. In this latter case, it seems to be an added privilege or power, but (as is stated at the end of the question) it is not a special gift given to those who are good. The last argument seems to point to the distinction made by others between *gratia gratum faciens* (grace making a person good) and *gratia gratis data* (grace enabling a person, whether good or not, to do something unusual for the good of the Church).

The brevity and variety of these short questions are typical of the questions in the manuscript written by the writer of hand *m*, who seems to have taken his materials either from actual lectures or from longer questions which he summarizes.

*Question 2 (nos. 316 and 401): On prayer, according to Master Peter de Bar*

This question is given in two redactions, which we designate as Redaction A and Redaction B; in the section of the question that we edit, Redaction A introduces a lengthy discussion, not found in Redaction B, about what kind of virtue prayer is. The master asks whether it is a virtue and, if so, whether it is a special virtue, and if it is that, whether it is a theological or a cardinal virtue or whether at least it is contained under one of them (1). For its part, the opening of Redaction B lists the four questions on prayer to be treated in the whole discussion (1).

With respect to Christ, the question about his prayer uses John Damascene's definition of prayer as the elevation or lifting up of the intellect into God. An opening argument states that those who pray intend to seek that God supply for their defects. Since, as Isaiah says, Christ bore our sorrows and infirmities, he had defects, and therefore prayed to the Father that, if it be possible, these be taken from him. Hence it seems that, in accord with Damascene's definition, prayer befits Christ (30A).

An opposing argument begins by saying there is no distance between God and man since Christ as man always rejoiced in himself as God (by the beatific vision). But since Damascene's definition of prayer involves a distance between the intellect lifted up to God and God, who is the term of that lifting up, prayer in that sense does not befit Christ (31AB).

Redaction B adds an argument about the word "intellect" in Damascene's definition. When prayer seeks God's help in supplying for one's defects, it appeals to God as good rather than as true. But since goodness pertains to the affective power, prayer will be in this power rather than in the intellect (32B).

Peter of Bar's solution distinguishes between *ascensus* as a participle and as a noun, when it is in the nominative case (33A). Taken as a participle, "lifted up," it signifies the terminus of the elevation (that is, the intellect as already "lifted up" to God) rather than a movement towards God; it thus indicates no distance between Christ as man and God.<sup>13</sup> In this sense prayer belongs to Christ. But, taken as a noun, "lifting up" signifies the imperfection involved in movement (Aristotle is quoted to support this point). Since in this sense a "lifting up" of Christ's intellect would imply a distance between his humanity and divinity, prayer in this sense would not befit Christ (33A).

Peter now softens the absoluteness of his position. Although there is no real middle distance between Christ's humanity and divinity, his humanity does stand apart from his divinity in dignity. Hence, even if Christ's human intellect is as perfect in dignity as any created intellect can be ("it is in the terminus of created dignity"), it is still distant in dignity from the divinity. In this respect one could grant that prayer befits Christ: he could lift up his intellect as from the less worthy to the more worthy (34AB).

In reply to the argument that prayer, as addressed to God's goodness, is found in the affective power (32B), Peter says that God's goodness is not the proximate efficient cause supplying for our defects. It is a moving cause, whereas the proximate efficient cause is God's power (35B). Although Peter does not draw out the implications of his reply, he seems to suggest that it would be the intellect that, understanding God's power to supply defects, addresses God and asks for this favour.

<sup>13</sup> Redaction B simply uses the word *ascensum* to indicate this point and says it then signifies the terminus and not the movement of lifting up (33). It adds nothing further, whereas Redaction A spells out the argument.

*Question 3 (no. 414): On prayer (Anonymous)*

This question begins from John Damascene's definition of prayer and asks, as did our question 2, how can Christ lift his intellect to God when he is one with God? (1) The answer is similar to that of question 2: in us prayer is like (*quasi*) a movement, whereas in Christ it is like (*quasi*) the terminus of a movement leading us to the Father. Hence it is only in an improper sense that Christ is said to pray (2).

Christ's prayer might also be understood as "a certain relation or intercession for his friends," and in this way Christ's intellect could be said to rise up to God by relating to God the needs of the faithful (3).

Our author suggests still another possibility. When Christ prayed that the chalice (of his passion and death) be taken from him, this could be considered the prayer of Christ's reason praying on behalf of his sensual appetite's desires (4).

The main part of the question is a long discussion of the four properties necessary for prayer, that is, that a person pray piously, for oneself, with perseverance, and for his or her salvation. At the end of the question the author wonders why we do not address Jesus in his human nature and ask him to pray for us, just as we address him in his divine nature by asking him to have mercy on us (7).

His reply is that we do not ask Christ to pray for us in order for us to avoid the Arian heresy, which held that the Son is inferior in essence to the Father. That is why, he says, the Arians said, "Glory to the Father, glory to the Son, glory to the Holy Spirit," implying that the glory of the Son is less than that of the Father (8).

Moreover, he adds, prayer seeks benevolence, and one gains benevolence by showing forth the dignity (of the one being prayed to). Therefore, our author argues, we ask Christ not to pray for us, but to hear us or to have mercy on us, and this in order to show forth his dignity (9).

With this remark the question comes to an end.

*Question 4 (no. 80): On the proof of Christ's resurrection (Anonymous)*

This, the first of our three questions concerning Christ's resurrection, deals briefly with some aspects of the appearance and bodily qualities of the risen Lord. A first rather simplistic argument holds that since fasting for forty days means fasting every one of the days, Christ's appearing for forty days should mean that he appeared each of the forty days: this, the argument concludes, is false (1).

The remaining arguments deal with questions about the risen and glorious Christ's eating. If he only put the food in his mouth and chewed it, this would be the same as what apparently risen bodies do; but if the food was taken into his body, there is a problem since bodies after the resurrection are spiritual; they are not animal bodies needing nourishment (2).

The author of this brief discussion first says that it would be miraculous and unnatural if some particle of everything that is eaten by the glorified body does not pass out in defecation (3); he remarks further that for food to be absorbed in glorified bodies the way that a drop of liquid is absorbed in fire would be miraculous, not natural (4). But he then presents a dilemma which he leaves unsolved. Bodies after the resurrection, he says, will be either animal, and so need food, or they will be spiritual. If they are animal, they will eat and incorporate the food; on the other hand, they cannot be said to be spiritual (and so neither eating nor incorporating food) because to do either would go against a text of the *Gloss* maintaining it is heretical to say that bodies after the resurrection will be spiritual (5). It may be that, faced with this dilemma, the author prefers absorption of food by a miraculous mode.

Finally, the author quotes Praepositinus of Cremona to the effect that for a glorified body to be held and to be touched is unnatural and depends on whether or not the glorified person wishes to allow this (6).

This unsatisfactory account derives from the practice of the author of the manuscript, who summarizes materials from many sources for his own purposes. The partial, fragmented character of the question is similar to many of his other jottings in the manuscript. This question, nevertheless, indicates some of the kinds of questions that were debated at the time. This particular question is related to the more general discussion of the "truth of human nature," that is, what belongs so integrally to human nature that it will be retained in the resurrection.<sup>14</sup>

<sup>14</sup> There are several questions in the Douai manuscript that deal with this broader topic: see, in Glorieux, nos. 156, 184-86, 315, 382, and 550.

On the development of this question, see Walter H. Principe, "De veritate humanae naturae: Theology in Conversation with Biology, Medicine, and Philosophy of Nature" in *Knowledge and the Sciences in Medieval Philosophy: Proceedings of the Eighth International Congress of Medieval Philosophy (S.I.E.P.M.)*, vol. 3, ed. Reijo Työriñoja, Anja Inkeri Lehtinen, and Dafinn Follesdal, *Annals of the Finnish Society for Missiology and Ecumenics* 55 (Helsinki, 1990), 486-94; and idem, "The Truth of Human Nature' according to Thomas Aquinas: Theology and Science in Interaction" in *Philosophy and the God of Abraham: Essays in Memory of James Weisheipl, O.P.*, ed. R. James Long, *Papers in Mediaeval Studies* 12 (Toronto, 1991), 161-77.



*Question 5 (no. 562): On Christ's apparition after his resurrection  
and before his ascension (Anonymous)*

This general question begins by indicating seven particular questions to be discussed regarding Christ's apparitions in the period between his resurrection and ascension (1). The delineation of these questions in the ensuing presentation is, however, not always clear. The first question asks what Christ's apparation was. The immediate brief reply is somewhat enigmatic: it seems to say that Christ's apparition was not sensible in itself, but for us it was, as it were (*quasi*), a sensible manifestation (2). This seems to imply something beyond the natural, some kind of accommodation of Christ's risen body to human perception. The next paragraph helps us understand this.

In the second question, the author asks about Christ's status at this time. He begins the discussion by quoting a scriptural text that speaks of heaven as being above while the earth is below. Christ's status at this time, he continues, was, as it were, in the middle between these two. For this author, judgment of Christ's status is based on two kinds of medium or middle, one his status in reality, the other his status in knowledge or perception (by others). Applying this distinction, this master says that before his passion Christ was mortal, passible, and weak both in reality and in the reasoning knowledge of others; after his ascension he was impassible and glorious both in reality and in the way others knew him;<sup>15</sup> in the middle time between his resurrection and ascension, Christ existed in a middle mode because, glorious and impassible in reality, he was passible and weak in other persons' knowledge of him (those who saw him would have judged him to have a body like others and to be able to suffer). "Therefore," the master concludes, "he was glorious in reality but not in perception" (by others); "conversely, he was infirm in perception (by others) but not infirm in reality" (3).

In the introduction (1), the third question was said to be about how contraries were in Christ. When the master comes to this question, he makes the question more explicit: was there a twofold species or form in Christ? It would seem not, he says, because our faith tells us that Christ had a glorious species or form. Yet, the argument continues, he had a non-glorious species, and therefore he had a glorious and a non-glorious species, which

<sup>15</sup> A perfect parallel would include "immortal" to correspond to the "mortal" of Christ's state before his passion. The text omits this, perhaps because the reporter failed to write it down.

seems impossible (4).<sup>16</sup> Thus the contraries indicated at the start are these two species that seem to be incompatible.

Another approach, perhaps seeking an answer to this dilemma, asks whether there is only one form, that of the subject (Christ), this form having a twofold power and signification. If this were so, Christ would show his glorified species or appearance to human beings and angels in glory and his non-glorified species or appearance to those not in glory (5).

This approach seems to stand behind the master's solution. He says that there was one form "in the truth of the subject" but a double species of the subject: this is understandable because "species" is related to a genus but form to matter. When Christ appeared to angels, he showed his glorious species, but when he appeared to human beings he showed a species "foreign" or "alien" to his real species (*species peregrini*). In such cases there was one form, but for our sakes this one form was directed to contrary acts, because the species in the appearances as man is "a form of knowledge" (6), that is, the form produces the species in order to impart knowledge to the human knower. Undoubtedly the master means—as a quotation from John suggests—that the species in human form is not the real mode of existence, but a mode assumed for adaptation to human knowledge.<sup>17</sup>

The master applies these ideas to Christ, explaining three kinds of wondrous signs through which Christ taught us. These signs were of something past, present, and future. As will be seen, the context of this entire question is Christ's appearance to the two disciples on the road to Emmaus.<sup>18</sup> The sign of something past, he says, was given to show that he was the numerically same person as before (his death): thus he ate and spoke to prove that he was alive, whereas, to prove he was the same person, he

<sup>16</sup> Throughout this and the following paragraphs, the Latin word *species* is ambivalent: it means both "appearance" and "class" (species as related to genus). Although we maintain the translation "species," at times this must be understood as "appearance." Here the glorious and non-glorious "species" seem to embrace both meanings.

<sup>17</sup> The phrases *apparentia angeli*, *apparentia hominis*, and *species peregrini* have been interpreted as referring to Christ's appearing to an angel and to a human being in different species; at first sight one might think that the author is contrasting two types of angelic appearance, but paragraphs 5 and 8 use terminology suggesting that the master in this paragraph 6 is referring to appearances by Christ. Paragraph 5 speaks of Christ's showing his glorified species to an angel, and paragraph 8 speaks of his having a *species peregrini* in addition to his *species gloriosa*.

<sup>18</sup> Besides the reference in the present text to the recognition of Christ in the breaking of bread (Luke 24:13-35, esp. 35), see also paragraph 11, which asks how *illi duo* understood Christ's way of appearing. This refers to the Emmaus disciples, since no other "two persons" are mentioned in the question; moreover, paragraph 17 speaks clearly of Christ's appearing "to those going to Emmaus."

showed the visage by which they (the Emmaus disciples) recognized him in the breaking of bread. This sign, given after his passion, showed forth his *past* mortal life. The sign of the present, he says, was the dove mentioned by John the Baptist (in the Gospel according to John) as that which would (presumably in the present) reveal Christ. The sign of the future was Christ's transfiguration and his taking on the qualities of the glorified body: Christ did this, he says, in order to show us the qualities we shall have in heaven (7).

The master's solution and explanation is rejected by a contrary argument holding that there were two species existing as accidents in Christ, their subject: a species foreign to his own and his own glorious species. This would mean that there were two contrary species at the same time in the same subject (8): this, the argument implies, would be impossible.

This argument leads the master to undertake a considerable philosophical development. After Christ's resurrection, he had "a species of incorruption" (*species incorruptionis*) but also a species of weakness (*species infirmitatis*), the latter to prove he was the same man as before his death. To show how these two species could coexist in the same subject, the author uses the example of colour as evidence that a species or form can be compared or related in two (distinct and non-contradictory) ways to the subject. In its more fundamental role, colour is related to its subject as an accident whose being is to be-in its subject: in this way a form informs another subject by making it to be of a certain quality (*tale*), and this without qualification (*simpliciter*) and not only for a time. The second comparison or relation of colour to its subject is that by which it shows forth the subject to others (9).

The master now applies the philosophy illustrated by this example to the case of Christ. The species of infirmity, also called a "foreign" or "alien" species (*species peregrini*) and possessed by Christ after his resurrection, performed the function not of informing Christ as subject but of showing him forth to others as subject. (Although the "species of incorruption" is not mentioned again, it would be for him that which informs Christ to make him "such" without qualification and not only for a time.) The author further explains the taking on of the "foreign" species by saying it was a matter of power rather than of essence, that is, Christ took on the power of showing himself in the same form as he previously had. He concludes with a summary: a species can be said to be "another" in two ways, by reason of essence and by reason of power. Christ assumed another species not by reason of essence but only by reason of power (9). The whole explanation is meant to show that Christ's resurrection appearances in a

bodily form, which the author consistently describes as a form of weakness,<sup>19</sup> did not come from an essential and permanent inhering quality, but were the result of a power assumed somewhat extrinsically for a time in order to prove the reality of Christ's risen identity.

The master adds still another distinction to make his teaching clear. There is a twofold power, the power of operating and the power of knowing. Christ did not take up another power of operating but he did take up another power of knowing, *potentia cognoscendi* (this should be interpreted as the power of making himself known). For, he explains further, just as the same subject can take on contraries, that power (of making himself known) could take on contraries, that is, it could take on two different kinds of knowledge according to the diversity and multiplicity of knowers (10). Here the author is referring back to his earlier remarks about Christ's appearing in one way to those in heaven and in another way to those on earth (5): there he had also spoken of a "twofold power and signification" and had applied it to these two ways of appearing.

Referring to the two disciples with whom the risen Christ walked, spoke, and ate, the master asks how they understood the (foreign) species since it was not "other in reality from (his) true form" (11). He first appeals to Boethius's statement that what is known is known according to the faculty or power of the knower rather than of the thing known, and he then applies this principle to the problem. Since the disciples understood Christ's glorious form according to their own passibility, they could not lay hold of Christ's glorious form: they saw him only as they knew him previously. The master explains the case further by contrasting this apparition with Christ's transfiguration. There Christ was passible and mortal, but over his form of passibility and mortality he assumed a species or appearance of glorification, immortality, and glorified properties. In his appearance to the disciples after the resurrection Christ had a glorified species or appearance, but over it he assumed a species or appearance of mortality and infirmity (11).

If angels and demons can assume figures such as colours and tastes whereby they can feed themselves, much more, the master adds, could Christ assume such a form together with the power of such a species. And if he could assume a power in being (*potentia in essendo*), much more could he assume a power of making himself known (12).

Our author now turns to the fourth question, whether Christ's appearance "was a phantasm like a sophism." Although the first two arguments and

<sup>19</sup> The context of Christ walking with the disciples to Emmaus and then eating with them would explain the author's description of Christ's having a form of weakness. The author makes no mention of the qualities of the glorified body of Christ described elsewhere in the Scriptures.

replies only imply this way of posing the problem, it becomes explicit afterwards. A first argument holds that everything that can be touched is corruptible, and since Christ was touchable after his resurrection, he was corruptible and therefore not glorified (13). The master replies that although what is touchable by nature is corruptible, Christ was not touchable by nature but only by a miracle (14). By this appeal to the miraculous he seeks to maintain the glorious state of Christ's risen body.

The next argument begins from the statement that everything that can be seen is changeable. Since Christ was visible, he was changeable and therefore his body was not glorious (15). The master's reply is similar to his previous one: the naturally visible is changeable, but in the case of Christ's risen body "nothing natural holds, simply speaking" (16). Again he points to the uniqueness of Christ's risen body, which puts it beyond the laws of natural physics.

The next argument makes the topic of phantasm explicit. Because Christ is himself the truth, he appeared truly and not like a phantasm to the disciples on the way to Emmaus. Therefore, the species of weakness and passibility was true and therefore Christ did not rise (17), that is, he did not rise in a glorious state.

The master replies that Christ's apparition was true and not a phantasm. He insists that although the species of infirmity was truly there, the form of infirmity was lacking, even though the species (of infirmity) was itself a form (18). Here the author is applying the distinctions he has already made earlier (9), and he repeats them against the argument that there is a lack of logic in proceeding from reality to reason. The argument asks how the species of infirmity was truly there without a form being there, unless the species is called a form (19). The master replies that if one means that the species of weakness was truly there as informing the subject, the statement is false; if one means that this species is there to make the subject known, it is correct that the species was truly there (19).

The same distinction is made in reply to another argument saying that if Christ showed himself only in the species of weakness without being in the species of weakness, he showed himself "sophistically," like a person putting on a cuirass (20). The master replies that "being in the species of weakness" can mean either being in the species as informing a subject or as showing forth the subject. The first was not the case with Christ; the second is true of Christ (21).

The next argument is based on the category of figure. If there was a double species in the risen Christ, this would mean that he had two figures. But this would be impossible because there cannot be two figures in the same subject in the same respect: a figure terminates quantity and is the

ultimate in a thing, and there cannot be two ultimates in a thing, just as a line cannot be terminated at two points on one end (22).

Although the master agrees with this reasoning, he adds that in Christ there was one form with a double power. This form is one in being, simply speaking, but multiple in being with respect to showing forth Christ to us. It is like a thing in place: it changes in different ways according to the different positions of those who see and know it (23).

A final argument in this sub-question holds that because Christ appeared otherwise than he was (that is, he did not appear glorified even though he was so), he was known other than he was. Hence Christ was not known truly (24), and so, it is implied, Christ did not appear truly.

The master replies simply that Christ appeared otherwise than he was in reality but not otherwise than he was in the knowledge he caused (25).

The final paragraphs deal briefly with aspects of the fifth sub-question mentioned at the beginning, that is, with Christ's sense knowledge, especially his speech and vision. The first question is whether and how Christ could speak. Speech requires that we strike the air, because our voice involves striking the air with some kind of imagination. But since Christ had a glorified tongue, how could the air resist it? (26). As for sight, it requires a seer, a seen object, and a medium. In the glorified Christ, however, there was no suitable relation between his eyes, the exterior things to be seen, and the medium, so that the question is how Christ could see (27).

The master replies that vision in others is receptive of sensible species or appearances and therefore is material and passible. But Christ's vision, he says briefly and without further explanation, was not material or needy but powerful (28). The lack of a reply to the argument about speech leaves one with the impression that the reporter had ceased giving all the details. Thus when the final question is put as to why Christ did not give a proof of his resurrection through the sense of smell, as he did through the other senses (29), the reply is simply "Everything [is to be judged] from the end" (30); this seems to mean that the end or purpose of the apparitions determines the means used by Christ, and it suggests that there was no need for a proof through the sense of smell.

This question is interesting above all for its application of various philosophical categories to the theological questions raised about Christ's apparitions after his resurrection.

*Question 6 (nos. 183 and 552): On the general resurrection (Anonymous)*

This question, the author indicates at the start, will deal with three topics: whether there is a resurrection, what it is, and who is its cause. The text

begins with the first of these, using texts of John Damascene and theological arguments (1-4), and then begins to ask about the second topic, what the resurrection is (5). After presenting three different definitions (6-9), the author at once introduces the causality topic, and it is here that discussions about Christ enter, the specific question being whether Christ's resurrection is the cause of our resurrection.

A text of Paul stating that if Christ has not risen, neither shall we arise, is quoted to insist that Christ's resurrection is indeed the cause of ours. Applying a grammatical rule, the author says, "If an affirmation is the *cause* of an affirmation, a negation is also the *cause* of a negation," that is, if for Paul the negation of Christ's resurrection negates our resurrection, then the fact that we rise must have Christ's resurrection as its cause. A text from (the gloss on) Psalm 67 confirms this for the author (10).

A counterargument holds that if Christ had saved the world in some other way (than by his passion and death), he would not have risen from the dead. In that case, we would rise from the dead (because we would be saved in this other way), but our resurrection would not be caused by any resurrection on Christ's part (11).

A second counterargument says succinctly that Christ's resurrection and ours have a common notion (*ratio*), and therefore his resurrection cannot cause ours (12). Here the debater implicitly invokes a principle that things having a common notion cannot be causes to each other.

The master's reply cuts through both the opening argument and the first counterargument. "Whether [Christ] suffered or not," he says, "his resurrection is not the cause of our resurrection." How is it related to ours? As an example (*exemplum*, which may mean "exemplar"), he maintains, "since God the Father and the whole Trinity made our [resurrection] unto the likeness of his." He supports his opinion with two texts from Augustine that speak clearly about such exemplarity. He concludes by saying that while our resurrection is patterned on the image of a human resurrection, by appropriation we are images of the (divine) Son (13).<sup>20</sup>

Redaction B alone adds a further discussion concerning Christ. It suggests, on Augustine's authority, the possibility that other modes of saving us were possible and argues that it was possible for our bodies to be saved without Christ's becoming incarnate. But if in fact Christ did become incarnate but

<sup>20</sup> This concluding sentence is somewhat obscure. The author seems to mean that the exemplarity of Christ (and our being to the image of Christ) is more than the exemplarity of his human resurrection. The author wants to recall that we are the image of God and therefore of all three persons of the Trinity, and, with reference to Christ, that we are by appropriation image of him as the Son, the second person of the Trinity.

did not suffer or die for us, he would not have risen from the dead. On the supposition that Christ's resurrection is the cause of our resurrection, the author of this argument holds that if Christ did not rise, the effect of our resurrection could not take place. Thus it would not be necessary that the effect (our resurrection) should take place, and so it was not necessary that its cause, Christ's resurrection, should take place (16).

In reply, the master says that one can conclude correctly from Augustine's "other possibilities" that there need not have been an *incarnation* for human salvation. But, he continues, we cannot apply Augustine's words to Christ's resurrection because, in fact, Christ (once he was incarnate) predicted and promised his resurrection; he did not, however, predict his incarnation (17). Although it was possible that Christ should not be incarnate and so not rise from the dead, once he was incarnate, it was necessary that he die and rise and that we do the same. The author qualifies the necessity: the resurrection of Christ and of ourselves is necessary by reason of God's promise or justice (18). Here the master relies not on any necessity of Christ's resurrection, or of its being a cause of ours, but on the necessity consequent on Christ's promise of his and our resurrection, and on God's justice in rewarding Christ and ourselves by resurrection after Christ's death (and, presumably, our death in Christ).

The rest of the debate deals with a new question, related to the *ratio* of the resurrection: whether the resurrection is miraculous or natural. Since no reference is made to Christ in these discussions, they are not summarized here.

*Question 7 (no. 187): On the resurrection (Master G)*

This short question asks whether any person's body other than Christ's has risen and gone to heaven. The question is posed in relation to those who rose "with Christ" and points to those who, as the Gospel according to Matthew says (27:52-53), rose from the dead at the time of Christ's death, came forth after his resurrection, and appeared to many in Jerusalem. The question is whether these went to heaven in a bodily state or whether they died again, their bodies being corrupted (*incinerati*). The arguments open with a series of scriptural passages presented to show that Christ alone ascended to heaven in his body, so that these others did in fact die and underwent bodily corruption (1).

Two other arguments, based on a certain naïveté about medieval relics and monuments, support this opinion. We know, they say, that the body of John the Baptist, the precursor of Christ, was corrupt after his (soul's) ascension to heaven. Moreover, the arguer adds (with a personal touch that



identifies his own origins), "we still have his head with us at Soissons."<sup>21</sup> If so great a person did not ascend bodily to heaven, what reason do we have to say that any other person's body so ascended? (2) As for those who rose with Christ, he adds, some of their bodies still rest in Jerusalem, and so it is probable that they died again (3).

The master replies to these arguments that it is indeed probable that no one except Christ ascended into heaven in bodily form. Even though those who rose with Christ died and became corrupt, they were nevertheless true witnesses to his resurrection (as is implied in the Gospel text) by the fact that they truly rose. Those who wish to be buried in the Holy Land so as to rise with Christ do this so as to be true witnesses to the resurrection of Christ and to have their bodies rejoice at Christ's presence (4).

Another question asks whether the Blessed Virgin was assumed in body as well as in soul, as a text of Augustine seems to indicate (5). The term "assumption" is applied to Mary alone and seems for that reason to indicate her being taken up in a unique way, that is, bodily (6). Moreover, the oration on the feast of her Assumption says that she should not be bound by the cords of death (7).

The master is dubious about Mary's bodily assumption. He says that Jerome had doubts about this matter and preferred to remain in doubt rather than "assert" something that is uncertain (8). Moreover, two authoritative texts seem to indicate that only Christ's flesh rose and was not subject to corruption. Hence, he concludes, we leave this question "undetermined," since, as Origen says, "It is not useless to remain in doubt about particular matters" (9).

This question is interesting as an example because of the way it uses authoritative texts on each side, as indicating the state of opinion on the assumption of Mary at this period, and for the attitude of the master in not trying to give a magistral determination to an uncertain question.

#### *Question 8 (no. 243): On prayer (Master G)*

Within a long and rambling series of questions and answers about prayer we find a few discussions of prayer to Christ or to the Trinity; these we isolate for our edition and summary.

After presenting definitions of prayer, one argument rejects prayer to the Holy Spirit: petitionary prayer is made with confidence, but there is no

<sup>21</sup> It is this remark that led Glorieux to identify the compiler of the Douai manuscript as Master G of Soissons. This, however, may not be Master G but rather someone from the audience giving his argument. For only in the next paragraph does the master speak in his own person.

special confidence in the Holy Spirit apart from that confidence expressed in the Father and the Son. Therefore, prayer should not be addressed to the Holy Spirit (3). This argument seems to be based on the texts of the liturgy, whose orations are not addressed to the Holy Spirit.

The master replies quite simply that we have one confidence and that this is confidence in the whole Trinity (4)—that is, evidently, without cutting out the person of the Holy Spirit.

The next series of questions asks especially about prayer to Christ. Is our prayer to be directed to the whole Trinity, to the incarnate Son, or indeed to the ancient fathers since we are all one in love? (5) Christ should be prayed to and can pray for us. Why? Because to have mercy belongs to divine power and to pray is the work of a mediator. But Christ has divine power and is mediator (6). Moreover, since Augustine says that Christ prays insofar as he is less than the Father but hears prayer insofar as he is equal with the Father, we can pray to Christ (7). Why, then, a counterargument asks, is it not said (undoubtedly in the liturgy), "Christ, pray for us"? (8)

The master replies that we should not direct prayer to Christ (that is, as human, he implies) lest we seem to agree with heretics who hold that Christ is a pure man or that such prayer does not involve praying to the divinity (9).

### III. EDITION OF THE TEXTS

In the edition of the texts emendations have been kept to the minimum required to correct obvious errors or to clarify the text; these emendations have been indicated in the text itself or in the notes.

Since these texts are interesting mainly to students of theology and philosophy and since they offer little of paleographical interest, the medieval spelling has been normalized according to classical usage, e.g., *ae* for *e*, *tio* for *cio*, *v* for *u*. Unusual spellings, however, have been noted.

ms refers to the hand of the original scribe.

#### *Abbreviations*

In the references the following abbreviations will be used:

apud Lyranum = *Biblia sacra cum glossa ordinaria et glossa interlineari . . . et postilla Nicolai Lyrani*, 7 vols. (1, 3, 6: Paris, 1590; 2: Venice, 1603; 4, 5: Lyons, 1545; 7: Lyons, 1590).

*De fide orth.* = Joannes Damascenus, *De fide orthodoxa*, PG (= textus graecus); Burg. (= versio latina Burgundionis, ed. E. M. Buytaert, *St. John Damascene: De Fide Orthodoxa: Versions of Burgundio and Cerbanus* [St. Bonaventure, N. Y.-Louvain, 1955]).

*Glossa interlin.* = *Glossa interlinearis*, apud Lyranum (q.v.).

*Glossa Lombardi* = Petrus Lombardus, *Commentarius in psalmos davidicos* (PL 191:55A-1296B) et *Collectanea in omnes d. Pauli Apostoli epistolas* (PL 191:1297A-1696C et PL 192:9B-520A).

*Glossa ord.* = *Glossa ordinaria* (PL 113:67B-1316C et 114:9A-752B; et apud Lyranum [q.v.]).

Ps.-Dionysius, *De div. nom.* = Pseudo-Dionysius Areopagita, *De divinis nominibus* (PG 3:585A-996B), trans. Eriugena (= *Versio operum s. Dionysii Areopagitae* 3: *De divinis nominibus* [PL 122:1111C-1172B]); *Dionysiaca* (= *Dionysiaca: Recueil donnant l'ensemble des traductions latines des ouvrages attribués au Denys de l'Aréopage*, ed. Ph. Chevallier et al., 2 vols. [Bruges, 1937-50]).

## &lt;Quaestio 1&gt;

*An Deus secundum <quod> homo facit miracula. Idem*

- 1 Quaeritur an Christus secundum quod homo possit facere miracula. Videtur quod sic, quia umbra, herbae, et lapides faciunt magnas virtutes. Ergo multo potius Christus secundum quod homo.
- 5 2 Item, Christus secundum quod homo potuit mundare et dare gratiam, et secundum quod homo scivit omnia. Quare secundum quod homo non potuit omnia cum utrumque signum sit divinae maiestatis?
- 3 Item, caro Christi vivificat, dat gratiam, auget gratiam. Quare non similiter Christus secundum quod homo?
- 10 4 Item, sacramenta Novae Legis efficiunt quod figurant. Ergo dant gratiam. Ergo et Christus secundum quod homo.
- 5 Item, apostoli eiciebant daemones, resuscitabant mortuos. Ergo et gratiam potuerunt dare.
- 6 Praeterea, circumcisio et alia sacramenta Veteris Legis non efficiunt  
15 quod figurant, sed Baptismus et alia sacramenta Novae Legis efficiunt quod figurant; aliter non esset differentia inter ea.
- 7 Item, quare attribuitur potius fidei facere miracula et virtutes quam caritati, cum dicat auctoritas: "Possibilia omnia amanti," et iterum alia: "Nihil est quod non possit caritas."
- 20 8 Praeterea, ipsa est perfectiva aliarum virtutum.
- 9 Sed quod fidei potius debeat attribui probatur quia per fidem fimus filii Dei et per fidem regeneramur. Ideo potius attribuitur fidei.
- 10 Praeterea, *Sancti per fidem vicerunt regna* etc.

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12 apostoli . . . mortuos: cf. Mt 10:1, 8.

18 Possibilia . . . amanti: non est inventus. Cf. Mc 9:22: *Si potes credere, omnia possibilia sunt CREDENTI*, et Augustinum, Sermo 70.3.3 (PL 38:444): "Omnia enim saeva et immania, prorsus facilia et prope nulla efficit amor. . . ."

19 Nihil . . . caritas: non est inventus. Cf. Ambrosium, *De fide* 5.15.188 (CSEL 78:287): "Nihil autem est, quod caritas dividat, nihil, quod divinitas sempiterna non possit . . .," et Augustinum, *In Iohannis evangelium tractatus CXXIV*, tr. 83.3 (CCL 36:536): "Vbi ergo caritas est, quid est quod possit deesse? ubi autem non est, quid est quod possit prodesse?" Forte auctor habet in mente 1 Cor 13:7-8: . . . *omnia suffert [caritas], omnia credit, omnia sperat, omnia sustinet. Caritas nunquam excidit.* . . .

23 Sancti . . . regna: cf. Hebr 11:32-33.

11 Item, Apostolus: *Si fidem habeam ut montes transferam* etc. Sed  
 25 hoc, scilicet transferre montes, maximum est miraculum, quod non dicitur  
 de caritate, et inde ut prius.

12 Dicebat quia, sicut dictum est, per fidem regeneramur, ideo potius  
 attribuitur fidei, et etiam quia miracula fiunt ad exercendam fidem ut fidei  
 accipientis et moventis fiat conformitas.

30 13 Item, quaeritur an bonis, eo quod faciunt miracula, insit aliquod  
 donum speciale. Quod videtur, 1 Cor 12, dicit Apostolus: *Alii quidem per  
 Spiritum datur sermo sapientiae, alii sermo scientiae secundum eundem  
 Spiritum, alii fides in eodem Spiritu, alii gratia sanitatis in uno <Spiritu>;  
 alii operatio virtutum, alii prophetia* etc., et infra: *Haec autem omnia  
 35 operatur unus atque idem Spiritus, dividens singulis prout vult*. Haec sunt  
 divisiones gratiarum. Ergo gratiae et doni specialis est operatio virtutum.

14 Item, prophetia est donum vel est doni. Ergo operatio virtutum.

15 Contra: Donum est voluntarium. Ergo quandocumque volet, move-  
 bitur illo vel illo dono et operabitur. Ergo dum vult, facit miracula.

40 16 Praeterea, si prophetia est donum, erit virtus, ad minus secundum  
 quosdam. Ergo illo meretur. —Contra: Non operatur cum difficultate. Ergo  
 non meretur.

17 Solutio: Sicut est donum prophetiae, sic est donum faciendi miracula,  
 sed quia utrumque fit sine difficultate, neutro meremur.

45 18 Si dicat aliquis quod miracula fiunt ex meritis, ergo qui habet maiora  
 merita potius operatur miracula: sed instantia in Joanne Baptista, qui non  
 fecit miracula.

19 Item, non valet: Est donum et voluntarium; ergo quandocumque  
 volet, operabitur illo. Instantia in dono prophetiae.

50 20 Item, quaeritur: Antiquitus fiebant miracula. Ad quid? Dicitur quod  
 ad roburandum fidem et ad praeparandum et excitandum ad fidem, et  
 propter multas alias utilitates, sed mali fecerunt et facient ut antiChristus.

21 Ergo ad praedicta.

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53 praedicta] praedictam MS

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24 Si . . . transferam: cf. 1 Cor 13:2.

31-34 Alii . . . prophetia: cf. 1 Cor 12:8-10.

34-35 Haec . . . vult: cf. 1 Cor 12:11.

<Quaestio 2>

<De oratione>

A

*De oratione*

B

*De oratione  
secundum magistrum de Bar*

1 Primo quaeritur quid sit oratio,  
utrum virtus, et si virtus, utrum ali-  
5 qua specialis virtus, et si specialis,  
utrum theologica vel cardinalis vel  
contenta sub aliqua earum.

1 <Q>uaeritur de oratione; pri-  
mo, quid sit oratio; secundo, in qua  
vi animae sit; tertio, de differentia  
obsecrationis, postulationis, orationis  
etc.; in quarto de differentia circum-  
stantiarum ipsius orationis.

A

2 Quod sit virtus videtur sic posse probari. Sicut contingit ieiunare  
10 superflue et diminute et mediocri modo cum debitis circumstantiis quas  
difficile est apprehendere sicut difficilis est inventio medii, ita contingit orare  
modo supradicto. Sed ieiunare est actus specialis virtutis. Ergo et orare;  
non nisi orationis. Ergo oratio est virtus et etiam specialis virtus.

3 Praeterea, orare est motus voluntarius et meritorius et est in praecepto.  
15 Unde Lc 11: *Petite et dabitur vobis*, *Glossa*: “*Petite orando.*” Ergo orare  
est motus sive actus virtutis.

4 Item, sicut ieiunium species est satisfactionis, <s>ic et oratio. Sed  
ieiunium est virtus. Ergo et oratio, et non est generalis virtus; ergo specialis.

5 Item, reprehensa fuit mater filiorum Zebedaei cum peteret a Domino  
20 dicens: *Dic ut filii mei sedeant unus a dextris et alius a sinistris in regno  
tuo*, quibus Dominus dixit: *Nescitis quid petatis. Potestis bibere calicem*  
etc.? quasi prius oportet vos pati quam regnetis. Ergo ex hoc habemus quod  
non exauditur oratio nisi facta fuerit debito modo. Ergo sistit in medio.  
Sed operatio facta hoc modo sistit in medio, scilicet superfluitatis et  
25 indigentiae, et tale est virtus vel opus virtutis. Ergo cum oratio sit talis,

1-2 De . . . Bar in marg. B

6 orationis] oratiois B

24 scilicet s.s. A

15 Petite . . . vobis: Lc 11:9.  
5:154v).

*Petite orando: Glossa interlin.* in Lc 11:9 (apud Lyranum

20-21 Dic . . . calicem: cf. Mt 20:20-22.

est virtus vel opus virtutis. Sed non est opus virtutis quia nihil est suus actus. Ergo oratio est virtus.

6 Item, habito quod oratio sit virtus, quaero quae virtus, utrum theologica vel cardinalis? Videtur quod non theologica, cum non sit fides vel  
30 spes vel caritas: orare enim nec est credere nec diligere nec sperare. Erit ergo virtus cardinalis. Quaeritur quae, utrum iustitia vel prudentia, fortitudo vel temperantia. Sed de nulla videtur verum esse cum hae quattuor actus habeant speciales, quorum nullus est orare: est enim iustitia in subveniendo miseris, prudentia in praecavendis insidiis, fortitudo in perferendis molestiis,  
35 temperantia in cohibendis delectationibus pravis.

7 Forte dicet quod est species iustitiae et non iustitia in genere, quod videtur, Tullio attestante qui ait: "Religio est species iustitiae." Sed oratio quaedam est religio.

8 Contra: dicit Apostolus, Rom 8: *Spiritus postulat pro nobis gemitibus*  
40 *inenarrabilibus*, et ibi "spiritus" ponitur pro sinderesi. Ergo postulatio sive oratio est in ratione. Ergo oratio magis est species prudentiae quam iustitiae.

9 Item, Hieronymus: "Ieiunio sanantur pestes corporis, oratione pestis mentis." Ergo sicut ieiunio cohibentur illiciti motus carnis, ita per orationem illiciti motus mentis, et ita temperantur. Ergo sicut ieiunium species est  
45 temperantiae, ita oratio; non ergo iustitiae vel prudentiae.

10 Item, "oratione sanatur pestis mentis." Sed pestis mentis est superbia. Ergo oratione sanatur superbia, et per modum contrarietatis fit sanatio quia contraria contrariis curantur. Ergo oratio est contraria superbiae. Sed proprie superbiae contraria humilitas. Ergo oratio est humilitas vel species humilitatis,  
50 non ergo iustitiae vel prudentiae.

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29 theologica<sup>2</sup>] theologia *A*  
cohibendis] cohaereundis *A*

33 nullus] nullum *A*  
42 Item *in marg. A*

35 temperantia] prudentia *A*

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37 Religio . . . iustitiae: sic citatus apud Guillelmum Altissiodorensem, *Summa aurea* 3.27.1 (ed. J. Ribaillier, 4 voll. in 7, Spicilegium Bonaventurianum 16-20 [Grottaferrata, 1980-87], 3.1:510). Cf. Ciceronem, *De inventione* 2.53 (ed. H. M. Hubbell, Loeb Classical Library [Cambridge, MA, 1949; rpt. 1976], 328): "Iustitia est habitus animi communi utilitate conservata suam cuique tribuens dignitatem. . . . Naturae ius est quod non opinio genuit, sed quaedam in natura vis inest, ut religionem, pietatem, gratiam, vindicationem, observantiam, veritatem. Religio est. . . ."

39-40 Spiritus . . . inenarrabilibus: cf. Rom 8:26.

42-43 Ieiunio . . . mentis: sic citatus apud Guillelmum Altissiodorensem, *Summa aurea* 3.27.1 (ed. cit., 3.1:510). Cf. Pseudo-Hieronymum, *Commentarium in Evangelium secundum Marcum*, c. 9 (PL 30:616C [ed. alt. 638C]): "Jejunio passiones corporis, et oratione pestes sanandae sunt mentis." Cf. *Glossam ord. in Marcum* 9:28 (PL 114:215A; apud Lyranum 5:106vaE).

46 oratione . . . mentis: vide n. praecedentem.

A

B

- 11 Secundo quaeritur de oratione quid sit definitive. Augustinus sic eam definit: "Oratio est pius affectus mentis directus in Deum."
- 55 Ergo oratio est in affectu. Ergo est caritas vel species caritatis.—Ad idem Gregorius: "Virtus orationis est celsitudo caritatis." Ergo est caritas vel species caritatis.
- 60 12 Contra: Damascenus sic eam describit: "Oratio est ascensus intellectus in Deum." Ergo oratio est in intellectu.
- 13 Ex his tribus definitionibus
- 65 videtur quod sit in duplici vi, non in una tantum.
- 14 Ad idem, super Mt 6, <Glossa>: "In fide et dilectione oratur Deus." Sed fides est in intellectu,
- 70 dilectio sive caritas in affectu. Ergo oratio est in utroque.
- 15 Item, Augustinus, 9 *De Trinitate*: "Verbum est notitia cum amore." Sed notitia est in intellectu,
- 75 amor in affectu. Ergo oratio est in utroque quia oratio est cum verbo interiori et exteriori.

- 11 Circa primum sic proceditur. Sicut dicit Augustinus: "Oratio est pius affectus mentis directus in Deum," ex quo apparet quod oratio est in affectu.
- 12 Contra: Damascenus ita definit orationem: "Oratio est ascensus intellectus in Deum." Ergo oratio est in intellectu.
- 13 Ex his ergo duabus definitionibus videtur quod oratio sit in duplici vi.
- 14 Ad idem, Mt 6, <Glossa>: "In fide et dilectione oratur Deus." Sed fides est in intellectu, dilectio seu caritas in affectu. Ergo oratio est in intellectu et affectu.
- 15 Item, dicit Augustinus in 9 *De Trinitate*: "Verbum est notitia cum amore": notitia in intellectu, amor in affectu. Ergo oratio erit in utroque quia oratio est cum verbo interiori vel exteriori.

51 Circa *corr. ex* Contra B

60 Damascenus *corr. ex* Damascenus B

53-54 [B 52-54] Oratio . . . Deum: cf. Alcherem Clarevallensem, *De spiritu et anima*, c. 50 (PL 40:816): "Oratio est mentis devotio, id est, conversio in Deum per pium et humilem affectum."

57-58 Virtus . . . caritatis: cf. Gregorium Magnum, *Homiliarum in Evangelia libri duo*, hom. 27 (PL 76:1209C): "Virtus ergo verae orationis est celsitudo charitatis."

61-62 Oratio . . . Deum: cf. Damascenum, *De fide orth.* 3.24 (PG 94:1089C); Burg., c. 68.1 (p. 267): "Oratio est ascensus intellectus ad Deum."

68-69 [B 68] In . . . Deus: cf. *Glossam ord.* in Mt 6:6 (apud Lyranum 5:24vaE): "In fide interiori et dilectione oratur Deus. . . ."

73-74 Verbum . . . amore: cf. Augustinum, *De Trinitate* 9.10.15 (CCL 50:307; PL 42:969): "Verbum est igitur quod nunc discernere et insinuare uolumus, cum amore notitia."



16 Item, oratio est interpretatio  
nostri defectus, qui dupliciter est in  
80 nobis: veri scilicet et boni. Sed de-  
fectus boni est in affectu, defectus  
veri in intellectu. Ergo oratio, cum  
sit interpretatio utriusque defectus,  
erit in intellectu et in affectu.

85

90

18 Ad idem Damascenus: "Ora-  
tio est petitio decentium a Deo." Non  
dicit "decentium affectui" vel "intel-  
lectui" <sed> simpliciter, in quo in-  
95 nuatur quod iste terminus "decen-  
tium" complectitur tam decentia<m>  
affectus quam intellectus, et ita oratio  
est in utroque.

100

105

21 Solutio: Ad primum [2] dico  
quod oratio est virtus et est virtus  
specialis, rationibus inductis ad  
utrumque [2, 4-5]. Sed notare debes  
110 quod dupliciter sumitur oratio, for-  
maliter et materialiter. Secundum  
quod formaliter, species est iustitiae  
et in ratione sita. Sumpta vero mate-

16 Item, oratio est interpretativa  
nostri defectus. Sed duplex est in  
nobis defectus, veri scilicet et boni,  
defectus boni in affectu, defectus veri  
in intellectu. Ergo oratio, quae est  
interpretativa utriusque defectus, erit  
in intellectu et in affectu.

17 Contra: Augustinus in 15 *De  
Trinitate*: "Formata cogitatio de re  
quam scimus est verbum." Ergo cum  
cogitatio sit in intellectu et oratio sit  
verbum vel non sine verbo, <55va>  
oratio erit in intellectu.

18 Ad idem Joannes Damas-  
cenus: "Oratio est petitio decentium  
a Deo." Non dicit "decentium affectui  
vel intellectui" sed simpliciter, in quo  
innuatur quod iste terminus "decen-  
tium" complectitur tam decentia<m>  
affectus quam intellectus. Ergo oratio  
<est> in intellectu et affectu.

19 Respondebat quod affectus  
sui ipsius verbum est et seipsum ex-  
primit.

20 Sed contra: Angelus loquens  
ad alium angelum non exprimit af-  
fectum suum, ex quo manifestum est  
quod affectus seipsum non exprimit.

21 Solutio: Oratio dupliciter su-  
mitur, materialiter et formaliter. Ora-  
tio formaliter sumpta est in ratione,  
materialiter autem sumpta omnem

86-87 Formata . . . verbum: cf. Augustinum, *ibid.* 15.10.19 (CCL 50A:486; PL 42:1071):  
"Formata quippe cogitatio ab ea re quam scimus uerbum est quod in corde dicimus. . . ."

91-92 [B 92-93] Oratio . . . Deo: Damascenus, *De fide orth.* 3.24 (PG 94:1089C); Burg.,  
c. 68.1 (p. 267).

115 rialiter circuit omnem vim animae  
 quia defectus omnium virium animae  
 interpretatur et exponit Deo, et sic  
 intelligitur illud: "Oratio est inter-  
 pretatio nostri defectus" [16]. Unde  
 sic magistraliter definitur: "Oratio est  
 120 expressio affectus vel desiderii directi  
 in Deum pro bonis habendis et malis  
 amovendis per verbum interius vel  
 exterius," et hoc concordat Magistro  
 Hugoni de Sancto Victore dicenti  
 125 quod "oratio est pia devotio mentis  
 ad Deum subnixa fide, spe, et cari-  
 tate," cum istae virtutes sint imme-  
 diatius nos ad Deum dirigentes quam  
 aliae.

vim animae circuit, quia oratio de-  
 defectus omnium virium interpretatur.

Magistraliter autem definitur oratio  
 sic: "Oratio est expressio affectus vel  
 desiderii directi in Deum pro bonis  
 habendis et malis amovendis per ver-  
 bum interius vel exterius," et hoc vult  
 Magister Hugo de Sancto Victore  
 dicens: "Oratio est pia devotio mentis  
 ad Deum subnixa fide, spe et cari-  
 tate."

## A

130 22 Ad id quod obicit in contrarium: "Est in ratione, ergo est species  
 prudentiae et non iustitiae" [8], proprie enim dicitur species iustitiae per  
 modum satisfactionis, quae satisfactio species iustitiae est, quae sita est in  
 ratione quantum ad quasdam species sui, et est in illa ratione fallacia  
 consequentis a superiori ad inferius affirmando.

135 23 Ad secundum dico quod non valet: "Cohibentur; ergo temperan-  
 tur" [9], et est consimilis modus arguendi primo et eadem responsio.

24 Ad tertium [10] dico quod oratio non sanat superbiam per modum  
 contrarietatis, sed et cum virtute eo quod necessario habet sibi humilitatem  
 annexam. Unde <133vb> Eccl 28: *Oratio humiliantis se penetrabit nubes.*  
 140 Mediante ergo humilitate, oratio expellit superbiam. Sic et superbia sanatur  
 et expellitur quandoque per timorem, non quia timor contrarius sit superbiae  
 sed quia timor inducit humilitatem qua mediante expellit superbiam.

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119-23 [B 119-22] Oratio . . . exterius: cf. Alexandrum Halensem, *Glossa in Sent.* 3.17 (Redactio L) 24.I.d (edd. Patres Collegii S. Bonaventurae, vol. 3 [Quaracchi, Florence, 1954], 182): "Oratio est expressio affectus in Deum directi, pro bonis habendis vel malis amovendis, vel verbum vel opus, interius vel exterius."

125-27 [B 124-26] oratio . . . caritate: cf. Hugonem de Sancto Victore, *De modo orandi*, c. 1 (PL 176:979B): "Nihil ergo aliud est oratio quam mentis devotio, id est conversio in Deum per pium et humilem affectum, fide, spe, charitate subnixa."

139 Oratio . . . nubes: Eccl 35:21.

## A

25 Ad id quod quaeritur in secundo articulo, quid sit definitive  
 145 [11-12], dico quod duplex est inquaerendo, quia potest intelligi de definitione materiali vel formali. Si de formali sic definitur, ut dicit Damascenus, quod "oratio est ascensus  
 150 intellectus in Deum."

## B

25 His visis, ad primum [11-12] respondemus quod non contradicunt Damascenus et Augustinus, nam Augustinus definit orationem formaliter, Damascenus materialiter.

## A

26 Aliae vero superius positae [13-15, 16, 18] materiales sunt. Unde, sicut dictum est [21], in ratione est, quod innuit Jac 1: *Postulet in fide, nihil haesitans*, *Glossa*: "Sic credat et sic iuvatur, et sic vivat ut dignus sit exaudiri." Unde oratio est in fide proprie, quare orando iustitiam de se  
 155 sumit homo, subdens se maiori a quo credit exaudiri.

## A

27 Et non valent huiusmodi obiectiones: "Oratio est in affectu et in intellectu; ergo in duplici vi" [13-16], cum proprie sit in intellectu, in quo fides, quae est humilitas intellectus. Est tamen in affectu quodammodo eo quod caritas movet et excitat ad orandum, unde pertinere dicitur ad caritatem, prudentiam, iustitiam et humilitatem et  
 165 religionem, sed ad fidem proprie, ut iam dictum est: est enim fidei ut regulantis, caritatis ut motivi, pru-

## B

27 Ad aliud [14] dicendum quod "in fide et dilectione oratur Deus" sicut in radice orationis meritoriae.

163 unde corr. ex uno A

165-66 et religionem in marg. A

167 om. est<sup>2</sup> A

149-50 oratio . . . Deum: vide n. ad ll. 61-62.

152-53 Postulet . . . haesitans: Jac 1:6.

153-54 Sic . . . exaudiri: cf. *Glossam interlin.* in Jac 1:6 (apud Lyranum 6:1265-66): "Sic credat et sic vivat ut dignus sit exaudiri [exendiri ed]."

dentiae ut imperantis, humilitatis  
170 per modum elicientis, religionis per  
modum laudis, iustitiae per modum  
satisfactionis.

175

29 Item, dicitur super Ps: *Ex-*  
*audi, Deus, deprecationem meam*  
etc., quod oratio est “quae pure Deo  
180 offertur”; “cum autem ad sanctos  
dirigitur, deprecatio.”

30 Secundum hoc obicitur de  
Christo, utrum oratio ei conveniat  
185 prout a Damasceno describitur sic:  
“Oratio est ascensus intellectus in  
Deum.” Videtur quod sic, quia qui  
orat intendit impetrare suppletio-  
nem sui defectus a Deo in quantum  
190 potens est supplere illum defectum  
[cf. *B* 32]. Sed Christus in se defec-  
tus habuit, unde Is 53: *Vere lan-*  
*guores nostros ipse tulit, et infirmi-*

28 Ad illud Augustini, “Verbum  
est notitia” etc. [15], dicendum quod  
loquitur materialiter: verbum enim  
est de toto cognito et amato.

29 Proprie autem oratio intel-  
lectus est, cum dirigitur ad Deum.  
“Cum autem ad sanctos dirigitur,  
est deprecatio,” sicut habetur in  
*Glossa* super illud Ps: *Exaudi Deus,*  
*deprecationem* etc.

30 Iuxta hoc obicitur de Christo,  
utrum oratio possit ei convenire  
secundum definitionem Damasceni  
prius assignatam,

176 toto in marg. *B*

180 est s.s. *B*

177-78 *Exaudi* . . . *meam*: Ps 60:2.

179-80 oratio . . . offertur: *Glossa interlin.* in Ps 60:2 (apud Lyranum 3:865B): “Quae Deo pure offertur.” Ex Cassiodoro, *Expositio in Ps.* 60.2 (CCL 97:538): “*Deprecatio* est assidua quidem communisque supplicatio, quam et hominibus a quibus aliquid petimus, frequenter offerimus; hanc a Domino deprecatur audiri. *Orationi* uero suae, quam tantum sanctae Trinitati iure persoluimus, postulauit *intendi*, id est prospici atque misereri, quoniam eam purissimam diuinis conspectibus offerebat. Cuius talis uirtus est, ut cum fideliter depromitur, probabile desiderium obtinere monstretur.”

179-81 [B 177-80] oratio . . . deprecatio [B Proprie . . . deprecatio]: cf. n. praecedentem et Alexandrum Halensem, *Glossa in Sent.* 3.17 (Redactio L) 24.II.a (ed. cit., 3:182): “Quod tantum Deus sit orandus, sic probatur: Psalmus: *Exaudi, Deus, deprecationem*, 60, 1, Glossa: ‘Deprecatio est, quae assidua est et hominibus [etiam] offertur, non tantum Deo. Oratio est, quae tantum Deo offertur.’” Ut notantur editores, textus *Glossae* est Lombardi, *Commentarium in psalmos*, in Ps. 60.1 [= 2] (PL 191:559A), qui addit: “Oratio est, quae Deo pure offertur” (ibid.); cf. n. praecedentem.

186-87 Oratio . . . Deum: vide n. ad II. 61-62.

192-94 Vere . . . portavit: cf. Is 53:4

tates nostras ipse portavit. Propter  
 195 hoc oravit ad Patrem sic: *Pater, si  
 fieri potest* etc. Ergo videtur quod  
 Christo conveniat oratio secundum  
 descriptionem Damasceni.

31 Contra: Nulla est distantia  
 200 Christi ad Deum, nam Christus  
 homo semper se Deo fruebatur. Cum  
 ergo ascensus intellectus in Deum  
 dicat distantiam inter intellectum as-  
 cendentem et Deum qui terminus est  
 205 ascensus, oratio sic descripta non  
 convenit Deo.

210

215

33 Solutio: Iste terminus “ascen-  
 sus” potest esse participium et nomi-  
 nativi casus, et sic terminum ascensus  
 significat. Hoc modo dicta descriptio  
 220 convenit Christo et hoc nulla notatur  
 distantia ipsius hominis ad se Deum.  
 Vel potest esse nomen et significans  
 motum qui dicit imperfectionem cum  
 “motus sit actus imperfectus”: sic ei  
 225 non convenit dicta descriptio quia sic  
 notaretur quod esset distantia huma-  
 nitatis ad divinitatem.

et videtur quod non, quia nulla est  
 distantia Christi hominis ad Deum,  
 nam Christus homo se Deo semper  
 fruebatur. Ergo, cum ascensus intel-  
 lectus in Deum dicat aliquam distan-  
 tiam inter intellectum ascendentem  
 et Deum qui terminus est ascensus,  
 oratio sic definita non conveniet  
 Christo.

32 Item, orans Deum intendit  
 impetrare suppletionem sui defectus  
 a Deo in quantum potens est supplere  
 defectum illum [cf. *A* 30]. Ipse autem,  
 in quantum bonitas est, huiusmodi  
 defectus supplet, non in quantum  
 veritas. Ergo, cum bonitas pertineat  
 ad affectum, non ad intellectum, ora-  
 tio erit in affectu, non in intellectu.

33 Solutio: Oratio in Christo  
 fuit ascensus intellectus in Deum ut  
 sumas “ascensum” pro termino as-  
 census, non pro motu.

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202 intellectus s.s. *A*

218 *post sic add. motum et del. A*

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195-96 *Pater* . . . potest: cf. Mc 14:35.

224 motus . . . imperfectus: cf. Aristotelem, *De anima* 2.5 (417a16-17; Firmin-Didot 3:451b): “. . . motus enim est quidam actus, imperfectus tamen . . .,” et *Metaphy.* 10.9 (1066a20-21; Firmin-Didot 2:595b): “Ac motus, actus quidem aliquis esse videtur, quanquam imperfectus. . . .”

34 Potest tamen dici quod licet  
 nihil sit medium humanitatis ad  
 230 deitatem, tamen multum distat hu-  
 manitas a deitate in dignitate. Unde  
 licet intellectus Christi hominis sit  
 in termino dignitatis creatae, tamen  
 respectu deitatis multa distantia est.  
 235 Unde secundum hoc potest concedi  
 quod oratio conveniat Christo illo  
 modo descripta, etiam in ultimo  
 sensu huius termini "ascensus."

240

34 Vel potest dici quod licet  
 nihil medium sit inter humanita-  
 tem Christi et divinitatem, tamen  
 multum distat humanitas a divinitate  
 in dignitate. Unde licet intellectus  
 Christi hominis sit in termino digni-  
 tatis creatae, tamen respectu divini-  
 tatis multa distantia est, et ita quoad  
 hoc potest esse ascensus intellectus  
 ad Deum.

35 Ad aliud [32] dicendum est  
 quod bonitas Dei non est causa  
 efficiens proxima suppletionis de-  
 fectuum in nobis, immo potentia  
 sua. Bonitas autem causa motiva est.

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228 Potest] post *A*      quod licet] licet quod *et corr. B*

### <Quaestio 3>

#### <De oratione>

<65vb-66ra, l. 20>

1 <C>onsequenter quaeritur de oratione. Primo sic: Sicut dicit Joannes  
 Damascenus, "Oratio est ascensus intellectus in Deum." Sed quaerit Joannes  
 Damascenus quomodo Christi oratio possit ascendere in Deum cum Jesus  
 5 Christus unus esset cum Deo.

2 Respondet ad hoc Joannes Damascenus quod Christus *format in*  
*se quod in nobis est*: oratio enim in nobis est quasi motus, in Christo  
 quasi <66ra> motus terminus, ducens nos ad Patrem. Unde improprie,  
 secundum Joannem Damascenum, dicendum est Christum orare.

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3 Oratio . . . Deum: *De fide orth.* 3.24 (PG 94:1089C); Burg., c. 68.1 (p. 267).

3-5 quaerit . . . Deo: *ibid.* (PG 94:1089D).

6-9 *format . . . orare*: cf. *ibid.* (PG 94:1089D-1092A); Burg., c. 68.1 (pp. 267-68): "Qualiter  
 igitur Dominus in Lazaro et tempore passionis orabat? Neque enim ascensione quae ad  
 Deum indigebat sanctus eius intellectus, semel secundum hypostasim Deo Verbo unitus; neque  
 ea quae a Deo petitione: unus enim est Christus; sed nostram propriam faciens personam,  
 et formans in seipso quod nostrum, et subscriptio nobis fiens et docens nos a Patre petere,  
 et ad ipsum extendi, et per sanctum eius intellectum dirigens nobis eam quae ad Deum  
 ascensionem. Quemadmodum enim passiones sustinuit . . . ; ita et orat nobis viam faciens,  
 ut dixi, ad eam quae ad Deum ascensionem. . . ."

10 3 Vel dicendum est quod oratio Christi est sic<ut> quaedam relatio vel intercessio pro amicis, et sic intellectus Jesu Christi ascendit ad Deum, referens necessitatem fidelium.

4 Vel dicitur Christus in cruce orasse dicendo: *Transfer a me calicem hunc*. Sed ita orabat ratio Christi pro sensualitate.

15 5 Secundo quaeritur de his quae sunt necessaria ad orationem. Quattuor autem sunt necessaria ad efficaciam orationis, ut scilicet homo oret pie, pro se, perseveranter, ad salutem. Sed videtur quod tria sufficiant ad bonitatem orationis sive ad eius efficaciam, scilicet numerus, species, et ordo: sine enim his tribus res non est bona et cum his tribus bona est, sicut testatur

20 Augustinus in libro *De natura boni*.

6 Responsio: Hae conditiones tres sunt entis creati in quantum ens creatum fluit a primo ente tamquam a sua causa efficienti, finali, et formali (exemplari, dico). Sed praedicta quattuor quae exiguntur ad orationis efficaciam sunt ipsius orationis in quantum oratio exit non solum  
25 a principio efficienti, formali, vel finali, sed etiam materiali. Quod autem ista quattuor ad orationis efficaciam exigantur patet ex diversis locis Scripturarum, quia dicitur in Mt 7, super illud: *Omnis qui petit, accipit*, *Glossa*: "Pie, perseveranter."

[ . . . ]

<66va, ll. 39-50>

7 Item, quaeritur quare non dicitur: "Sancte Jesu Christe, ora pro  
30 nobis," habito tantum respectu ad humanam naturam quae in ipso est, ut dicendo: "Christe, miserere nobis," profiteremur in eo divinam naturam, et dicendo: "Christe, ora pro nobis," profiteremur humanam naturam in Christo.

8 Responsio: Non dicitur: "Christe, ora pro nobis," ut vitetur haeresis  
35 Ariana, quae ponebat Filium esse minorem Patre secundum essentiam. Unde Ariani dicebant: "Gloria Patri, gloria Filio, gloria Spiritui Sancto," innuentes in hoc minorem esse gloriam Filii quam Patris.

9 Item, inde captatur benevolentia, sed nascitur benevolentia in ostensione dignitatis. Ad ostendendum ergo Christi dignitatem, dicitur: "Christe, audi  
40 nos" vel: "Miserere nobis," et non: "Christe, ora pro nobis."

30 in ipso est, ut *corr. ex ea ipso est s.s. et in marg. ms* 38 benevolentia<sup>1</sup>] benivolentia ms benevolentia<sup>2</sup>] benivolentia ms 40 Miserere] Misereatur et *corr. ms*

13-14 *Transfer . . . hunc*: cf. Lc 22:41.

18-20 sine . . . boni: cf. Augustinum, *De natura boni* 3 (CSEL 25:856; PL 42:553): ". . . haec ergo tria: modus, species, ordo, tamquam generalia bona sunt in rebus a deo factis siue in spiritu siue in corpore."

27 *Omnis . . . accipit*: Mt 7:8.

28 *Pie perseveranter*: *Glossa interl.* in Mt 7:8 (apud Lyranum 5:28v).

## &lt;Quaestio 4&gt;

*De probatione resurrectionis Christi*

1 *Per quadraginta dies apparuit eis loquens de regno Dei.* Sed si aliquis  
ieiunat per quadraginta dies, exigitur quod qualibet die de quadraginta  
ieiunet. A simili, si Christus apparuit per quadraginta dies, qualibet die de  
5 quadraginta apparuit, quod falsum est.

2 Item, convesci voluit ut probaret suam resurrectionem quia vere  
resuscitati comedunt, phantastice non. Ergo naturaliter Christus post re-  
surrectionem comedit. Sed quaeritur quid exigitur ad hoc quod aliquis  
dicatur comedere. Si ponere cibum in os et masticatio, sic faciunt phantastice  
10 resuscitati; si incorporatio, contra: corpora post resurrectionem erunt  
spiritualia, non animalia, id est, alimentis indigentia.

3 Praeterea, *omne quod intrat in os et in secessum emittitur*, id est,  
de omni aliquid, et si aliter fieret, esset mirabile, non naturale.

4 Praeterea, in historia <scholastica?> dicitur quod sicut gutta in camino  
15 ignis absorbetur, sic cibus in corporibus glorificatis. Sed hoc non fit  
naturaliter, immo per miraculum.

5 Praeterea, corpora post resurrectionem aut erunt animalia, id est,  
alimentis indigentia, aut spiritualia. Si primum, ergo vere comedent et in-  
corporant; si secundum, contra, *Glossa* reputabat quemdam haereticum eo  
20 quod dixit quod post resurrectionem corpora erunt spiritualia.

6 Item, Praepositinus dicit quod corpus glorificatum, quando vult,  
detinetur et tangitur, quando non vult, non. Ergo tangi sibi est voluntarium;  
non ergo naturale.

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9 faciunt] fatiunt MS      11 alimentis] alimaniis MS      15 sic cibus *corr. ex* scibus MS  
22-23 Ergo . . . naturale *in marg. inf.* MS      22 voluntarium] uuolū MS

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2 Per . . . Dei: cf. Act 1:3.

12 omne . . . emittitur: cf. Mt 15:17.

19-20 reputabat . . . spiritualia: cf. *Glossa ord.* in 1 Cor 15:47 (apud Lyranum 6:345C):  
“Ambro. Si ideo ut haeretici volunt nostri generis assumptus homo non fuit, qui coelestis  
dicitur, ergo nec isti naturae nostrae sunt qui coelestes appellantur [15:48]. Si vero de his  
nemo dubitat, nec de illo est ambigendum.”

21-22 corpus . . . non<sup>2</sup>: haec sententia attribuitur Praepositino a Guillelmo Altissiodorensi,  
*Summa aurea* 4.18.2.2 (ed. cit., 4:482), sed, ut notatur ibi, non inventa est in operibus Prae-  
positini quae habemus.



## &lt;Quaestio 5&gt;

*De apparitione Christi post resurrectionem et ante ascensionem*

1 Quaesitum est de apparitione Christi post resurrectionem ante ascensionem. Primo, quid apparitio Christi; secundo, quis status apparentis; tertio, qualiter contraria in ipso; quarto, an esset ibi phantasma quasi sophisma; 5 quinto, de omnibus sensibus; <203ra> sexto, de oculis videntium et manibus tangentium; septimo, de comestione eius.

2 Prima quaestio est quid apparitio Christi. Secundum omnes sensus apparitio Christi est insensibilis nobis quasi sensibilis manifestatio.

3 Secunda quaestio fuit quis status eius, 25 Prov: *Caelum sursum, terra*  
10 *deorsum*. Inter hoc sursum et deorsum istud fuit status Christi quia in medio. Christus ante passionem fuit mortalis, passibilis, et infirmus re et ratione cum cognitione; post ascensionem impassibilis et gloriosus re et cognitione; in medio tempore medio modo se habens quia gloriosus et impassibilis re, passibilis vero et infirmus cognitione. Iudicandum est igitur in hac quaestione 15 secundum naturam medii: duplex enim esse, rei scilicet et cognitionis. Re ergo gloriosus fuit, cognitione non; e converso cognitione infirmus, re non infirmus.

4 Item, quaeritur utrum in Christo fuerit duplex species sive forma. Quod non videtur quia constat quod in ipso fuit species sive forma gloriosa: 20 haec enim est fides nostra. Sed habuit speciem <non gloriosam>. Igitur habuit speciem gloriosam et non gloriosam, quod videtur impossibile.

5 Item, quaeritur an esset ibi una forma. Forma subiecti duplex, potentia et significatione, ut homini glorificato sive angelo ostendet glorificatam speciem, non glorificatam vero non glorificato.

25 6 Solutio: Una forma fuit in veritate subiecti, tamen duplex species subiecti: species enim ad genus dicitur, forma vero ad materiam, unde in apparentia angeli species gloriosa, in apparentia hominis species peregrini. Unde ibi erat una forma ad actus contrarios, et hoc propter nos. Unde Jo 11: *Non propter me facta est vox haec, sed propter vos*: species enim 30 tum forma cognitionis.

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1 De apparitioni [!] Resurrect. et Ascens. in marg. manu moderno MS      2 ante bis  
exh. MS      5 sensibus] ssnonsibus MS      11 fuit] fuut MS      13 et s.s. MS  
20 Sed] .s. MS      22 forma!] for MS      25 subiecti] .s. MS      26 subiecti] scilicet MS

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9-10 Caelum . . . deorsum: Prov 25:3.

29 Non . . . vos: cf. Jo 12:30.

7 Sciendum igitur quod triplex est signum in illis mirabilibus, scilicet praeteriti, quo ostendebatur quod ille fuit idem numero quod et prius, 1 Act: *Praebuit seipsum vivum . . . in multis argumentis*: ad probandum se esse vivum, comedit et loquebatur; ad probandum se esse <se>ipsum, ostendit  
35 faciem qua cognoverunt eum in fractione panis. Signo autem praeteriti quod fiebat post passionem eius ostenditur vita mortalis et praeterita. Signum praesentis fuit columba, Jo 1: *Super quem videritis columbam* etc. Tertium signum est futuri, sicut in transfiguratione et sumptione dotum: sumpsit enim dotes ut ostenderet quales dotes habe<bi>mus in patria.

40 8 Contra: Habuit speciem peregrini, quia non monstravit se in specie quam non habuit. Illa species fuit accidens. Igitur fuit in illo ut in subiecto. Similiter species gloriosa fuit in Christo. Igitur contraria simul et semel in eodem.

9 Solutio: Est species incorruptionis, quae fuit in Christo post resur-  
45 rectionem; est species infirmitatis, quae fuit in eo ad probationem veritatis, scilicet quod fuit idem quod prius. Sed species sive forma duas habet comparationes, ut color: unam ad subiectum in quo est, et sic *accidentis esse est inesse*, et sic forma informat subiectum alterum quia facit tale—simpliciter dico, non ad tempus. Alia est comparatio quam habet ad  
50 demonstrandum subiectum, sicut color demonstrat subiectum. Secundum hanc comparationem habuit Christus speciem infirmitatis ad demonstrandum subiectum, non autem quantum ad subiectum informandum. <Ergo> remansit aliqua species infirmitatis in Christo post resurrectionem. Sumpsit ergo speciem <203rb> peregrini ad demonstrandum et ostendendum subiectum,  
55 non ad informandum. Haec igitur assumptio speciei magis est potentiae quam essentiae: sumpsit enim potentiam in eadem forma quam prius habuit ostendendi se. Unde species dicitur “alia” dupliciter: ratione essentiae—sic non sumpsit aliam; ratione potentiae—sic sumpsit.

10 Sed duplex est potentia: operandi—sic non sumpsit <aliam poten-  
60 tiam>; cognoscendi—sic sumpsit aliam: sicut enim eadem substantia susceptiva est contrariorum, sic potentia illa susceptiva fuit contrariorum quia cognitionis talis et talis secundum diversitatem et pluralitatem cognoscentium.

11 Qualiter comprehenderunt illi duo illam speciem cum non erat alia

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33 vivum] unum MS	35 Signo] Signum MS	38 sumptione] suptione MS
42 post Similiter add. in et del. MS	48 alterum] alter MS	52 subiectum <sup>1</sup> ] .s. MS
informandum] in formam dum MS		

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33 Praebuit . . . argumentis: Act 1:3.

37 Super . . . columbam: cf. Jo 1:32-33.

38 in . . . dotum: cf. Mc 9:1-6; Lc 24:13-43; Jo 21-22.

in re a vera forma? —Solutio: Boethius: “Omne quod scitur vel cognoscitur  
 65 scitur vel cognoscitur non secundum facultatem sui sed secundum facultatem  
 cognoscentis apprehendit.” Unde illa forma Christi gloriosa fuit comprehensa  
 ab eis secundum sui passibilitatem. Unde non potuerunt apprehendere  
 formam gloriosam sed talem qualem de eo habuerunt prius. Unde hic est  
 70 converso modo ut in transfiguratione quia in transfiguratione fuit Christus  
 passibilis et mortalis et habuit formam passibi<li>tatis et mortalitatis et super  
 illam assumpsit speciem glorificationis et immortalitatis et dotis. Hic e  
 converso: erat enim prius post resurrectionem in Christo species glorificata  
 et super illam assumpsit speciem mortalitatis et infirmitatis.

12 Probatio quod hoc potuit facere, quia angelus et daemones assumere  
 75 possunt figuras, ut colores et sapes unde possunt se incibare. Multo fortius  
 Christus potest assumere sibi formam talem et potentiam talis speciei, et  
 si potentiam in essendo, multo fortius potuit in cognosc<e>ndo.

13 *Glossa*, 24 Lc: “Subtrahitur carnalibus oculis species infirmitatis ut  
 mentibus inciperet agere gloria resurrectionis.” “Omne palpabile corruptibile.”  
 80 Sed Christus tunc fuit palpabilis. Primum verbum dicit Gregorius. Ergo  
 fuit corruptibilis. Non igitur fuit glorificatus.

14 Solutio: “Omne palpabile corruptibile”: verum est “palpabile” natura.  
 Christus vero non fuit palpabilis natura, sed miraculo.

15 Item, Augustinus: “Omne visibile mutabile.” Christus visibile; ergo  
 85 etc.; non igitur gloriosus.

16 Solutio: Verum est quod visibile natura mutabile est, unde nihil  
 naturale tenet simpliciter in hac materia.

17 Item, Christus apparuit euntibus in Emmaus non phantastice, cum  
 ipse sit veritas, sed vere. Igitur vere fuit ibi species infirmitatis et passibilitatis.  
 90 Non igitur resurrexerat.

18 Solutio: Vere apparuit, non phantastice, et vere fuit ibi species  
 infirmitatis, non tamen forma infirmitatis, licet species sit forma.

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69 ut] et MS      quia] quasi MS      75 incibare] in cibaris MS      79 agere] forte  
 apparere      88 Emmaus] emax. MS

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64-66 Omne . . . apprehendit: Boethius, *Philosophiae consolatio* 5.pr.4.25 (CCL 94:96-97):  
 “. . . omne enim quod cognoscitur non secundum sui uim sed secundum cognoscentium  
 potius comprehenditur facultatem.” Cf. ibid. 5.pr.6.1 (CCL 94:100-101): “Quoniam igitur,  
 uti paulo ante monstratum est, omne quod scitur non ex sua sed ex comprehendentium  
 natura cognoscitur. . . .”

78-79 Subtrahitur . . . resurrectionis: *Glossa ord.* in Lc 24:31 (apud Lyranum 5:182vaF)  
 [leg. apparere *pro* agere].

79 Omne . . . corruptibile: non est inventus.

84 Omne . . . mutabile: cf. Augustinum, *De Trin.* 3.9.21 (CCL 50:150; PL 42:881): “. . . uisi-  
 bile autem quidquam non est quod non sit mutabile.”

19 Sed si arguatur: “Est ibi commutatio praedicati a re ad rationem; unde erat ibi vere species infirmitatis, non forma, nisi dicatur forma species?”

95 Sed haec est duplex: est ibi species infirmitatis, quia ubi est sensus, ibi est vere species infirmitatis quantum ad informandum subiectum—sic falsa est; vel quantum ad cognitionem, et sic vere fuit ibi species etc.

20 Item, “ostendit <203va> se in specie infirmitatis,” dicit *Glossa*, et non fuit in specie infirmitatis. Igitur ostendit se sophistice sicut qui induit loricas.

100 21 Solutio: haec est duplex: “Non fuit ibi species infirmitatis,” quia non fuit in specie informante subiectum; fuit autem in specie infirmitatis ostendente subiectum. Unde *Glossa*: “Ostendit duo contraria.”

22 Item, quaeritur an erant ibi duae figurae sicut duae species, immo duplex species, ut verius dicatur, quia si duae species, duae species <sunt>  
105 duae figurae, quod est impossibile in eodem subiecto ex eadem parte, quia si duae figurae, una esset supra alteram et tunc non figura, quia figura est terminatio quanti, formaliter loquendo. Secundum rem figura est quantitas terminata. Unde figura est ultimum in re: non autem sunt duo ultima quia quod per superabundantiam dicitur [et] uni soli convenit, sicut linea non  
110 potest terminari ex eadem parte ad duo puncta.

23 Quod concedimus. Sed erat una forma duplicis potentiae: unius esse simpliciter sed multiplicis in ostensione quoad nos: similiter in collocatione, eo quod diversimode immutat secundum diversitatem situs in apprehensione et cognitione.

115 24 Item, Christus apparuit, et aliter quam fuit, quia non apparuit glorificatus sicut fuit. Igitur aliter fuit apprehensus quam fuit. Igitur non vere.

25 Solutio: Apparuit aliter quam fuit in re, sed non aliter apparuit quam fuit in cognitione.

120 26 Item, qualiter potuit Christum videre, tangere, loqui, comedere, quia nostrum loqui est aerem percutere: est enim vox percussio aeris cum imaginatione aliqua. Cum Christus habuit linguam glorificatam, qualiter potuit resistere aer?

27 Item, tria exiguntur ad visum: videns, visum, medium. Nulla era<t>  
125 convenientia inter oculum eius et exteriora quae vidit et medium. Qualiter igitur potuit videre?

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95 ubi] vel MS      97 sic] si MS      105 post figurae add. .s. et del. MS      108 autem]  
ante MS      109 post dicitur add. et MS      112 simpliciter] semper MS      multiplicis]  
multiplicis MS      similiter] similem MS      collocatione] collo MS      113 eo] co MS  
diversitatem] diversa MS      123 aer] fort. aeri legendum est

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98 ostendit . . . infirmitatis: cf. par. 13 et n. ad ll. 78-79.

102 Ostendit . . . contraria: *Glossa ord.* in Lc 24:39 (apud Lyranum 5:183raB).

28 Solutio: Sensus est susceptivus sensibilibus specierum etc. Isto modo non fuit visio Christi quia haec est materialis et passibilis. Sed visio Christi fuit potestativa, non materialis vel indigentiae.

130 29 Item, quaeritur quare non dedit argumentum resurrectionis per sensum olfactum sicut per alios sensus?

30 Solutio: A fine omnis.

131 olfactum] olpactum MS

### <Quaestio 6>

#### *De resurrectione generali. Idem*

#### AB

1 <Q>uaestionis de resurrectione generali est prima pars an sit resurrectio, secunda, quid sit, tertia a quo sit. Multis autem rationibus probat Joannes Damascenus quod est resurrectio, quarum prima haec est: "Si non est  
5 resurrectio, non distamus ab irrationabilibus." Sed habentes animam incorruptibilem necesse est distare ab omnibus habentibus animam corruptibilem. Ergo necesse est resurrectionem esse.

2 Adhuc, si non est resurrectio, beatiora essent vegetabilia quam nos, nam hic continua tristitia est. Unde si gaudium in futuro non haberet homo,  
10 deterioris conditionis esset quam vegetabilia.

3 Adhuc, "si non est resurrectio, neque Deus est neque providentia Dei," quoniam "si non est justus, non est Deus." Sed si non est justus, non est resurrectio quoniam non reddet unicuique quod suum est. Ergo a primo, si non est resurrectio, non est Deus. Sed necesse est Deum esse. Ergo necesse  
15 est resurrectionem esse.

1 De ... Idem *in marg.* A: idem. de eodem B      2-3 om. Quaestionis ... a quo sit B      3 om. autem B      rationibus] modis B      om. Joannes B      4 est<sup>1</sup>] sit B      om. haec B      6 om. omnibus B      8 Adhuc] Item B      beatiora] beatius B      essent] erit B      vegetabilia] vegetabile B      9 nam ... est] etenim (?) hic est etiam continua tristitia B      om. homo B      11 Adhuc] Item B      resurrectio] resurrecturus B      Deus est] *trp.* B      12 quoniam] quod probo quia B      Sed] Item B      13 quoniam] quia B      14 est<sup>2</sup>] *add.* iustus et del. B1      14-15 necesse<sup>2</sup> est] et B

4-5 Si ... irrationabilibus: cf. Damascenum, *De fide orth.* 4.27 (PG 94:1220B); Burg., c. 100.2 (p. 378): "Si enim non est resurrectio, in quo ab irrationabilibus distamus?"

11 si ... Dei: cf. ibid.: "Si igitur non est resurrectio, neque Deus est, neque providentia. ..."

12 si ... Deus: cf. ibid. (PG 94:1220C); Burg., c. 100.2 (p. 379): "Iustus enim est Deus, et hiis qui sustinent ipsum mercedis retributor fit."

4 Adhuc, Joannes Damascenus: "Non est Deus mortuorum sed viventium." Ergo vivent postquam moriuntur, et ita resurrectio erit.

5 Item, adhuc opponitur: Resurrectio tam damnatorum quam salvandorum erit. Quaeratur ergo quae sit ratio communis ad utrumque?

20 6 Adhuc autem Joannes Damascenus: "Resurrectio est copulatio rursus animae et corporis." Sed in Lazaro erat copulatio rursus animae et corporis. Ergo resurrectio fuit ipsius.

7 Dicendum ad primum [5] quod multae sunt rationes resurrectionis magistrales, sed haec propriissima est, scilicet, quod resurrectio est susceptio  
25 vitae immortalis post mortalem. Unde haec ratio convenit etiam illis qui subito moriuntur in fine, unde Apostolus: *Seminatur in corruptione, resurget in incorruptione*.

8 Sciendum etiam quod resurrectio dicitur alio modo immutatio in gloriam et convenit salvatis solum; unde impii non resurgent.

30 9 Tertio modo dicitur iterata copulatio animae et corporis et sic resuscitatio est resurrectio.

10 Adhuc, 15, 1 ad Cor: *Si Christus non resurrexit, nec nos resurgemus*. Ergo resurrectio Christi est causa nostrae resurrectionis, quoniam si causa est affirmatio affirmationis, et negatio est causa negationis, unde 67 Ps,  
35 <Glossa>: *Dedit ei efficaciam resuscitandi mortuos*.

11 Sed si Christus alio modo liberasset mundum, non esset resurrecturus.

16 Adhuc] Item B	om. Joannes B	17 om. vivent A	moriuntur] morientur B
om. et . . . erit B	18 om. adhuc opponitur B		post Resurrectio add. est B
19 om. erit B	Quaeratur] Quaeritur B	om. ergo B	20 Adhuc] Item B
om. autem Joannes B	rursus] resurrectio A	21 Lazaro] luxaro A	copulatio
rursus] iterata copulatio A	om. animae et corporis A	22 om. fuit ipsius B	
23 Dicendum] Solutio B	resurrectionis corr. ex resurrectiones A	24 propr. est]	
trp. B om. scilicet B	25 om. Unde B	etiam illis] omnibus B	25-26 om.
qui . . . fine B	26 corruptione] corruptionem A	27 incorruptione] icorruptione A	
28 Sciendum . . . quod] Sed B	resurrectio . . . modo] alio modo dicitur resurrectio B		
29 salvatis solum] tantum salvatis B	om. unde . . . resurgent B	30 animae et	
corporis] trp. B	32 Adhuc . . . Cor] Item, 15 Cor 1 B	33 quoniam] quia B	
33-34 om. causa est B	34 om. est causa B	67] corr. ex 68 A	67 Ps] in
psalmo B	35 Dedit ei efficaciam] efficaciam dedit B	post resuscitandi add. omnes B	

16-17 Non . . . viventium: ibid. (PG 94:1221); Burg. c. 100.4 (p. 380); ex Ex 3:6.

20-21 Resurrectio . . . corporis: cf. Damascenum, ibid. (PG 94:1220A); Burg., c. 100.1 (p. 378): ". . . resurrectio omnino est copulatio rursus et animae et corporis."

26-27 Seminatur . . . incorruptione: 1 Cor 15:42.

32 Si . . . resurgemus: cf. 1 Cor 15:14-17.

35 Dedit . . . mortuos: cf. *Glossa interlin.* in 1 Cor 15:11 (apud Lyranum 6:331-32): "Qui est causa efficiens resurrectionis mortuorum." Cf. *Glossam Lombardi* in 1 Cor 15:14 (PL 191:1676D): "*Si autem*, hoc est, scilicet, si *Christus resurrexit a mortuis*, qui est efficiens causa resurrectionis mortuorum. . . ."

Ergo videtur quod resurrectio Christi non est per se causa nostrae resurrectionis, quoniam tunc essemus resurrecturi licet Christus non resurrexisset.

12 Adhuc, communis est ratio nostrae resurrectionis et resurrectionis  
40 Christi. Ergo sua non est <A 190rb> causa nostrae.

13 Dicendum quod sive passus sive non passus, non est causa nostrae resurrectionis sua resurrectio. Unde dicendum quod resurrectio Christi est exemplum nostrae resurrectionis quoniam ad eius similitudinem Deus Pater et tota Trinitas facit nostram. Augustinus in 4 *De Trinitate*: "Ad exemplum  
45 exterioris hominis nostri et omnium corporalium resurrectionis pertinere invenitur resurrectio corporis Domini," et *De civitate Dei*: "Talia sunt corpora nostra futura qualia Christus monstravit in sua resurrectione exemplo": una enim eius resurrectio nobis praestitit duas resurrectiones. Fecit ergo ad imaginem hominum, per appropriationem tamen ad imaginem Filii,  
50 et sic respiciet nos ad imaginem.

14 Item, quaeritur an sit miraculosa resurrectio. Videtur quod non quia nihil quod necesse est fore est miraculosum. Sed necesse est resurrectionem fore. Ergo resurrectio non est miraculosa.

15 Adhuc, Petrus contra Clementem: "Si Deus iustus est, resurrectio  
55 erit." Sed necessarium est Deum esse et non est miraculosum. Ergo resurrectio non est miraculosa.

38 quoniam] quia *B* *om.* Christus *B* 39 Adhuc] Ad idem *B* 39-40 resurrectionis Christi] suae *B* 41 ante Dicendum *add.* Ad hoc *B* sive<sup>1</sup> . . . passus<sup>2</sup>] sive esset passus *B* est] esset *B* post causa *add.* exemplaris *B* 42-43 Unde . . . exemplum] Et propter hoc, quia passus fuit, eius resurrectio exemplum est *B* 43 quoniam] quia *B* 44 Augustinus in] ut *B* Trinitate *corr.* ex civitate *B2* 48 *om.* eius resurrectio *B* 49 hominum] hominem *B* 51 Item] Sed *B* *om.* quaeritur . . . quia *A* 52 est] sit *B* miraculosum] miraculum *B* necesse est resurrectionem] resurrectio non necesse est *B* 53 resurrectio . . . miraculosa] est non miraculum *B* 54 Adhuc] Item *B* 55 necessarium . . . miraculosum] primum est necessarium, ergo et secundum *B*

44-46 Ad . . . Domini: cf. Augustinum, *De Trin.* 4.3.6 (CCL 50:168; PG 42:891): "Et ad exemplum resurrectionis exterioris hominis nostri pertinere invenitur resurrectio corporis domini. . ."

46-48 Talia . . . exemplo: cf. Augustinum, *De civ. Dei* 10.29 (CCL 47:306; PL 41:309): "Qualia sanctorum corpora in resurrectione futura sint, potest aliquanto scrupulosius inter Christianorum scripturarum doctissimos disputari; futura tamen sempiterna minime dubitamus, et talia futura, quale sua resurrectione Christus demonstravit exemplum."

48 una . . . resurrectiones: forte sunt verba Augustini, sed non sunt inventa. Doctrinam duarum resurrectionum (animarum et corporum, sive in spiritu secundum fidem et in corpore) frequenter docet Augustinus; videsis *De civ. Dei* 20.6-7 (CCL 48:706-9; PL 41:665-67); *In Iohannis evangelium tractatus CXXIV*, tr. 19.8-10, 14-17 (CCL 36:192-94, 197-200; PL 35:1546-48, 1551-54); *Sermo* 362, 19.22-24.26 (PL 39:1626-30). Hae citationes datae sunt a Pablo Goñi, *La resurrección de la carne, según San Agustín*, Catholic University of America Studies in Sacred Theology, second series, no. 122 (Washington, D.C., 1961), chap. 2, ubi etiam haec doctrina examinata est.

54-55 Si . . . erit: cf. Damascenum ut supra, n. ad l. 12.

## B

16 Item, possibile fuit eum non incarnari quia, ut dicit Augustinus: "Alius modus" etc. Sed si vere fuisset incarnatus nec passus fuisset pro nobis nec mortuus, ergo nec resurrexisset. Sed eius resurrectio causa est nostrae  
60 resurrectionis, et potuit cessare causa. Ergo potuit cessare effectus. Ergo non fuit necessarium huiusmodi effectum fore eventurum, et iste effectus est nostra resurrectio. Ergo non fuit necessarium resurrectionem fore venturam.

17 Responsio: De incarnatione verum est quod dicit Augustinus sed non  
65 de resurrectione, cum eam praedicasset et promississet, sed non praedicavit suam incarnationem.

18 Sed hoc nihil est: utrumque enim fuit possibile, et eum non incarnari et sic eum non resurrexisse, quia unum sequitur ex altero. Sed eo incarnato, necesse fuit eum mori et resurgere, et nos similiter—necessitate dico promissi  
70 sive iustitiae Dei.

## AB

19 Adhuc, quod universaliter accidit non est miraculosum. Sed resurrectio accidit universaliter in tota specie humana. Ergo non est miraculosa, quoniam miraculum est alicuius singularis, unde Gregorius: "Quoniam rationabiles sumus conditi, spem resurrectionis nostrae ex ipsa rerum specie  
75 et contemplatione debemus colligere."

20 Adhuc, Joannes Damascenus: "Confitendum est resurrectionem

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57-70 Hic textus ponitur in B 95ra post para. 24 65 promississet] promississet B  
67 non] vero B 71 Adhuc] Item B miraculosum] miraculum B 71-75 Sed . . .  
colligere] Sed resurrectio est tale quia *omnes resurgemus*, ut dicit Apostolus. Ergo resurrectio  
non est miraculosa. Item, resurrectio est alicuius rei singularis. Ergo nos qui rationabiles  
conditi sumus in spe resurrectionis possumus colligere quod erit ex ipsa rerum specie, et  
ita naturalis B 76 Adhuc] Item B *om.* Joannes B

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58 Alius modus: cf. Augustinum, *De Trin.* 13.10.13 (CCL 50A:399-400; PL 42:1024):  
". . . parum est sic refellere ut istum modum quo nos per *mediatorem dei et hominum*  
*hominem Christum Iesum* deus liberare dignatur asseramus bonum et diuinae congruum  
dignitati; uerum etiam ut ostendamus non alium modum possibilem deo defuisse cuius  
potestati cuncta aequaliter subiacent, sed sanandae nostrae miseriae conuenientioremodum  
alium non fuisse nec esse oportuisse."

73-75 Quoniam . . . colligere: Gregorius Magnus, *Moralia in Job* 14.55.70 (CCL 143A:742;  
PL 75:1077A).

76-78 Confitendum . . . virtutem: cf. Damascenum, *De fide orth.* 4.27 (PG 94:1225C);  
Burg., c. 100.12 (p. 385): "Ita igitur crede et mortuorum resurrectionem futuram esse divina  
virtute et voluntate et nutu: concurrentem enim habet cum voluntate virtutem."



futuram futuram esse voluntate Dei et auctoritate et virtute: concurrentem enim habet cum voluntate virtutem,” et ita videtur quod voluntaria sit et non naturalis.

80 21 In *Glossa* super illum psalmum: *Jubilate*: “Primum signum potentiae Dei est resurrectio quoniam potentia Dei maxime apparet in resurrectione,” et ita miraculosa est resurrectio.

22 Adhuc, Augustinus in libro *De quantitate animae*: “Si cursum naturalem rerum videmus, ita certa nobis erit resurrectio ut solem oriri cras,”  
85 et ita videtur quod sit naturalis resurrectio.

23 Adhuc, in *Glossa* super illum psalmum: *Deus, venerunt Gentes*: “Ex occultis finibus naturae redintegratur corpus humanum,” et ita videtur quod naturalis sit resurrectio.

24 Adhuc, dicit Augustinus quod si corrumpatur granum ad hoc ut fiant  
90 alia grana, nec fierent nisi prius corrumperentur et tamen remanet ratio seminalis in grano corrupto ut iterum fiant alia grana, similiter videtur quod resurrectio sit naturalis ita ut corrumpatur corpus nostrum primo et remanet ratio seminalis ut resurgat. Unde cum in grano sit generativa et nutritiva,

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77 *om.* futuram<sup>2</sup> *B* concurrentem] concurrentam *A* 80 In ... psalmum]  
Item, *Glossa* super *B* Primum] Proprium *B* 80-81 potentiae ... est] est poten-  
tiae *B* 81 quoniam] quia *B* apparet] apparuit *B* 82 ita ... resurrectio]  
sic videtur miraculosa *B* 83 Adhuc] Item *B* *om.* in libro *B* 84 nobis erit]  
*trp.* *B* 85 quod ... resurrectio] iterum naturalis *B* 86-88 In *B* hoc argumentum  
invenitur post para. 28 86 Adhuc] Item *B* *om.* *Glossa* ... illum *B* psalmum]  
psalmo *B* Gentes] *Glossa* *B* 87 redintegratur] reintegratur *B* 87-88 quod ...  
resurrectio] iterum quod sit naturalis *B* 88 post resurrectio *add.* Praeterea, c<or>pus  
naturaliter est c<orruptibile>. Sed corruptibile et inc<orruptibile> sunt opposita. Ergo, si  
corruptio sit a natura, incorruptio non er<it> ab eodem principio in marg. *B* (aliqua  
verba truncata sunt secatione marginis; supplevimus partes deficientes) 89 Adhuc ...  
quod] Item, Apostolus *B* ad hoc] adhuc *A* fiant] fuerit *A* 90 post cor-  
rumperentur *add.* alia *B* 91 *om.* alia *A* similiter] sic *B* 92 *om.* resurrectio ...  
ut *B* (cf. n. ad ll. 86-88). *om.* nostrum *A* primo] primum *A* 93 post resurgat  
*add.* et ita videtur quod resurrectio sit naturalis *B* (cf. l. 85) cum ... sit] sicut est  
in grano est vis *B* generativa et nutritiva] *trp.* *B*

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80-81 Primum ... resurrectione: cf. *Glossam ord.* in Ps 65:6 [*mentiuntur*] (apud Lyrannum 3:893A): “Maxime potentia Christi secundum hominem in resurrectione, unde Psalm. intitatur “apparuit.” Unde proprium signum potentiae, scilicet resurrectionem, commendat.” Cf. Augustinum, *Enarr. in Ps* 65:6 (CCL 39:844-45; PL 36:791).

83-84 Si ... cras: cf. Augustinum, *De quantitate animae* 1.33.76 (PL 32:1077): “Videbimus etiam naturae hujus corporeae tantas commutationes et vicissitudines, dum divinis legibus servit, ut etiam ipsam resurrectionem carnis, quae partim tardius, partim omnino non creditur, ita certam teneamus, ut certius nobis non sit, solem, cum occiderit, oriturum.”

86-87 Ex ... humanum: cf. *Glossam interlin.* in Ps 78(79):2 (apud Lyrannum 3:1041-42): “Cum tamen ille ex occultis naturae finibus totum reintegret, cui etiam capilli capitis nostri numerati sunt.”

89-93 si ... resurgat: haec verba non sunt inventa, sed simile argumentum dat Augustinus, *Sermo* 361.8.9-10.10 (PL 39:1603-4).

corrumpitur tantum nutritiva licet non generativa quoniam ipsa est ad  
95 incorruptionem: sic ponere videtur in corpore resurgente. <B 95rb>

25 Adhuc, Apostolus: *Oportet mortale hoc induere immortalitatem*, et  
ita oportet resurrectionem esse.

26 Adhuc, in resurrectione corporis est miraculum. Sed post istam  
reparationem est unio animae cum corpore. Sed cum perfectio naturaliter  
100 appetit suum perfectibile, videtur quod in resurrectione sit aliquod mira-  
culosum et aliquid de natura.

27 Adhuc, resurrectio est articulus. Ergo non est naturalis, quoniam fides  
non est eorum quae a natura sunt.

28 Adhuc, ad Thess: *Ipsa Dominus in voce archangeli et iussu et tuba*  
105 *Dei descendet*, et ita videtur quod hic notatur triplex causalitas per ista  
tria.

29 Ad praeobiecta dicendum quod haec divisio nulla est <A 195va>:  
“Resurrectio aut est miraculosa aut naturalis” [21, 22], quoniam potest esse  
voluntaria. Unde bene concedendum est quod necessarium est fore quoniam  
110 a voluntate Dei, sed non omne tale est miraculosum.

30 Ad aliud [19] dicendum quod resurrectio non est naturalis a natura  
alicuius rei singularis sed a natura speciei huius, unde Dionysius dicit quod  
est resurrectio supra naturam quoad nos, non tamen contra naturam, unde  
supra naturam particularem est, non tamen supra naturam universalem.

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94 corrumpitur . . . nutritiva] et nutritiva corrumpitur B quoniam] quia B om.  
ipsa B 95 om. ponere B 96 Adhuc] Item B 98 Adhuc] Item B  
resurrectione] reparatione B istam] hanc B 99 om. est B post corpore  
add. est B perfectio] perfectivum B 100 appetit] appetat B aliquod]  
aliquid B 102 Adhuc] Item B quoniam] quia B 103 a natura sunt] sunt  
a natura B post natura (sunt B) add. sed eorum sunt supra v<e> praeter naturam  
in marg. B1 104 Adhuc] Item B ad Thess] tessa. 2 B 105 ista]  
haec B 106 post tria ponit B par. 23 107 est] sit B 108 miraculosa aut  
naturalis] trp. B quoniam] quia B 109 concedendum est] concedo ipsam  
fore B 109-10 quod . . . voluntate] quia necessarium est secundum voluntatem B  
111 om. dicendum B non in marg. A 112 om. huius B om. dicit B  
113 est resurrectio] trp. B

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96 Oportet . . . immortalitatem: 1 Cor 15:53.

104-5 Ipse . . . descendet: cf. 1 Thess 4:16.

113-14 est . . . universalem: cf. Ps.-Dionysius, *De div. nom.* 6.2 (PG 3:856D-857A); trans.  
Eriugena, *Dionysiaca* (quod sequimur) 1:374-75 (PL 122:1152A-B): “Et hoc autem divinius,  
quia et totos nos, animas dico et conjugata corpora, ad perfectissimam vitam et immortalem  
promittit transmutaturam [transmutationem PL]: rem vetustati quidem aeque contra naturam  
visam; mihi autem et tibi et veritati, et divinam et super naturam. Super naturam autem  
eam [ei PL] quae secundum nos est (dico) visibilem, non fortissimam divinae vitae. Ipsi  
enim, velut omnium existenti vitarum naturae et maxime divinatorum, nulla vita contra naturam  
[add. aut super naturam PL].”

115 31 Ad rationem Joannis Damasceni [20] dicendum quod differt voluntas et virtus quando notatur diversa causalitas: est enim voluntas causa sicut ipse Deus, et virtus sicut causa cum officio connotato increato.

32 Dicendum etiam quod licet resurrectio sit articulus [27], non tamen est miraculosa quoniam omnipotentia Dei est articulus, non tamen mira-  
120 culosa.

33 Ad aliud [23] dicendum quod “ex occultis finibus naturae” dicitur redintegrari quoniam ex causis mediis quae occultae sunt redintegrantur.

34 Ad aliud [14, 25] dicendum quod bene sequitur gratia terminorum in homine quod necesse est resurrectionem fore.

125 35 Ad aliud [26] dicendum quod in natura est materia appetitiva et forma appetibilis et supra naturam est materia appetibilis et forma appetitiva, unde dicendum quod nec reparatio nec unio animae cum corpore est naturalis a natura inferiori.

36 Ad aliud [28] dicendum quod iussio est sicut superioris et vocatio  
130 inferioris et tuba ministrantis: sicut enim in regeneratione spirituali est potestas auctoritatis et excellentiae et ministerii, sic est hic triplex potestas in resurrectione, quae notantur per illa tria, scilicet, in voce, iussu, et tuba Dei.

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115 *om.* Joannis *B* 118 etiam] *ergo B* 118-19 tamen est] *trp. B* 119 quoniam . . . est] cum potentia Dei sit *B* 122 redintegrari] reintegrari *B* *post* reintegrari *add. per modum glossae* “naturae” potest ibi esse dativi casus, et sic est planum *in marg. B2* redintegrantur] reintegrantur *B* 124 fore] esse *B* 125 *om.* dicendum *B* *om.* est *A* 126 et<sup>1</sup>] sed *B* est materia] *trp. A* forma] formae *A* appetitiva] appetiva *A* 129 iussio est] *trp. B* 130 inferioris] *corr. ex ferioris s.s. B* 131 auctoritatis] *accon . . . tis A* *om.* et<sup>1</sup> *B* *om.* et<sup>2</sup> *A* 132 *post* resurrectione *add.* Sed ab alio et non nisi a miraculo. Ergo fiet corpus per miraculum; non nisi in resurrectio. Ergo resurrectio erit miraculosus [*sic*], non naturalis. *in marg. B2* notantur] notatur *A* *om.* scilicet *B* *post* tuba *add.* Sed adhuc remanet dubium an in damnandis anima appetat corpus, ut in salvandis. *B* 133 *om.* Dei *B*

### <Quaestio 7>

#### *Idem [G], de resurrectione*

[ . . . ]

<95ra, ll. 10-18>

1 Item, quaeritur de illis qui surrexerunt cum Christo, an post incinerati sint, quia *Glossa* dicit ibi ubi fit mentio de virga Aaron quae floruit et

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3 *Glossa*] *G. ms*

fronduit quia sola Christi caro refluuit, et Christus loquens de sua carne  
 5 ait: *et refluuit caro*, et Apostolus vocat eum *primogenitum ex multis*  
*fratribus* quia ipse surrexit et in caelos ascendit. Dicitur etiam *primitiae*  
*dormientium*, et Apostolus: *Christus resurgens ex mortuis, non moritur*,  
 quod de Christo specialiter est dictum. Dicitur etiam: *Passer solitarius in*  
*tecto*.

10 2 Sed qua ratione diceremus aliquem ascendisse in corpore si Joannes  
 Baptista non ascendit, qui fuit praecursor eius, cuius corpus post ascensionem  
 legimus incineratum fuisse et adhuc caput eius apud nos Suessione?

3 Quod autem aliqui eorum qui surrexerunt cum Christo iterum mortui  
 sunt probabile est quia corpora quorundam adhuc quiescunt in Jerusalem.  
 [ . . . ]

<ll. 24-38>

15 4 Ad hoc dico quod probabile est quod nullus nisi Christus ascendit  
 in corpore, quia illi qui resurrexerunt cum Christo, quamvis iterum incinerati  
 sint, erant tamen veri testes resurrectionis Christi quia vere resurrexerunt  
 et post incinerati sunt. Illi vero qui affectaverunt sepiliri in terra sancta ut  
 cum Christo resurgerent, ideo hoc optaverunt ut resurrectionis Christi veri  
 20 testes essent, et ad tempus eorum corpora praesentia eius gaudeant, quorum

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17 erant] erunt ms

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4 sola . . . refluuit: cf. *Glossa ord.* in Job 19:25 (apud Lyrannum 3:210E): “*Et in novissimo die de terra* etc. Quasi per eius resurrectionem spero mihi simile, sed in fine: quia nostra adhuc corpora usque in finem mundi a resurrectionis gloria differuntur, ut aliae virgae manserunt aridae, sed sola virgo Aaron, id est, corpus sacerdotis nostri in florem resurrectionis erupit: quo flore sacerdos esse ostenditur, qui pro nobis interpellat.” Cf. Gregorium Magnum, *Moralia* 14.50.68 (CCL 143A:741; PL 76:1075D-1076A): “Ecce ergo iam uirga Aaron post ariditatem floret; sed uirgae duodecim tribuum in ariditate remanent, quia iam quidem corpus Domini post mortem uiuit, sed nostra adhuc corpora usque in finem mundi a resurrectionis gloria differuntur.”

4-5 Christus . . . caro: id est, Job, loquens in persona Christi, secundum interpretationem figurativam Gregorii Magni et *Glossae ord.* in Job 19:25 (apud Lyrannum 3:210E): “*Et in novissimo die de terra surrecturus sum et rursum* etc. Quia resurrectionem quam in se ostendit, in nobis etiam quandoque facturus est. Resurrectio quippe quam in se ostendit, nobis promisit quia sui capitis gloriam sequuntur membra. Exemplo quippe monstravit quod promisit in praemio, ut sicut ipsum resurrexisse fideles agnoscerent, ita in seipsis in fine mundi resurrectionis praemia sperarent. Et hoc est quod dicit: *Et in novissimo die de terra* etc. Quasi [etc. ut supra, n. ad l. 4].” Ex Gregorio, *Moralia* 14.55.68 (CCL 143A:740).

5-6 primogenitum . . . fratribus: Rom 8:29.

6-7 primitiae dormientium: 1 Cor 15:20.

7 Christus . . . moritur: Rom 6:9.

8-9 Passer . . . tecto: Ps 101(102):8.

13 aliqui . . . Christo: cf. Mt 27:52-53.

resurrectionem multum vellent quia praeter Deum nihil plus desiderant quam ut corpora sua resumant.

5 De Beata Virgine etiam quaeritur an assumpta sit cum corpore et anima, quod videtur velle Augustinus qui ait: "Non solum carnem quam  
25 Christus assumpsit, sed etiam eam de qua assumpsit assumptam credimus esse in caelum."

6 Hoc nomen etiam "assumptio" hoc insinuere videtur: dicitur enim: "Assumpta est in caelum," id est, cum corpore sumpta, quod de nullo alio dicitur.

30 7 In illa etiam oratione qua dicitur in Assumptione: Nec tamen mortis nexibus deprimi potuit" etc.

8 Sed super hoc Hieronymus dubitat, dicens melius esse dubitare quam incertum asserere.

9 Illa vero auctoritas quae dicit quod sola Christi caro floruit [/] opinioni  
35 praedictae contradicit et illa quae specialiter de corpore Christi loquens ait: *Nec dabis sanctum tuum videre corruptionem*, unde nos hanc quaestionem indeterminatam relinquimus quia, ut dicit Aristoteles: "Dubitare de singulis non erit inutile."

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24-26 Non . . . caelum: citatus ut Augustini ab Alano de Insulis, *Elucidatio in Cantica canticorum* 1 (PL 210:64A-B): "Unde Augustinus in sermone *De assumptione Virginis*: Non solum carnem" etc. Citatus etiam ut Augustini a Pelagio Parvo, *Sermo I in festivitatem Assumptionis Beatissimi V. M.*; vide editionem partialem a G. Quadrio, *Il Trattato "De Assumptione Beatae Mariae Virginis" dello Pseudo-Agostino e il suo influsso nella Teologia Assunzionistica Latina*, *Analecta Gregoriana* 52, sect. B, no. 21 (Rome, 1951), p. 278, qui dicit hanc citationem non inveniri ad litteram sed ad sensum in tractatu pseudo-Augustini, *De assumptione Beatae Virginis Mariae* (PL 40:1141-48).

30-31 Nec . . . potuit: *Sacramentarium Gregorianum*, ed. D. H. Lietzmann, *Das Sacramentarium Gregorianum nach dem Aachener Urexemplar*, *Liturgiewissenschaftliche Quellen und Forschungen* 3 (Münster i. W., 1921; rpt. 1967), 88.

32-33 melius . . . asserere: cf. Hieronymum, *Commentarium in epistolam ad Philemonem*, v. 15 (PL 26:650A, ed. alt.): "Pulchre autem addens *forsitan* sententiam temperavit. Occulta sunt quippe iudicia Dei, et temerarium est quasi de certo pronuntiare quod dubium est. *Forsitan*, inquit, *ideo discessit*: caute, timide, trepidanter, et non toto [*Al. totum*] fixo gradu. . ." Citatus modo abbreviatus in *Glossa ord. in Philem.*, v. 15 (PL 114:642C; apud Lyranum 6:780F), et in *Glossa Lombardi* ibid. (PL 192:397D).

36 Nec . . . corruptionem: Ps 15(16):10.

37-38 Dubitare . . . inutile: cf. Aristotelem, *Categoriae* (8b23-24); trans. Boethius, *In Categorias Aristotelis* 2 (PL 64:238D): "Fortasse diffinit est de huiusmodi rebus confidenter declarare, nisi saepe pertractata sint, dubitasse autem de his singulis non erit inutile."

<Quaestio 8>

<De oratione>

<104vb, ll. 1-4>

1 Damascenus orationem sic definit: "Oratio est ascensus intellectus ad Deum," vel "petitio descendendum a Deo," et sic in oratione est descensus a Deo ad nos et ascensus a nobis ad Deum, de quorum utroque Eccl 35.

5 2 Item, dicitur oratio materialiter quia dicitur verbum sive factum sive cogitatio, et sic omnis bene agens orat. Dicitur etiam oratio "pius affectus in Deum" ad impetrandum aliquid, et sic satisfacit orando et est poenalis. [...]

<ll. 27-29>

3 Item, nos postulamus in confidentia, unde credentes omnia, ac-  
<ci>piemus. Sed confidentia est in Patre vel in Filio et non est aliqua  
10 specialis <confidentia> in Spiritum Sanctum alia ab illis. Ergo Spiritus Sanctus non est orandus.

4 Solutio: Una est confidentia totius Trinitatis.

[...]

<ll. 46-61>

5 Item, quaeritur an ad totam Trinitatem dirigenda sit oratio. Item, an ad Filium incarnatum. Item, an ad antiquos patres cum una sit dilectio.

15 6 Item, cum misereri sit divinae potestatis et orare sit mediatoris, et in Christo sit utrumque, Christus est orandus et potest orare pro nobis.

7 Item, Augustinus: "Ex hoc rogat Christus quod minor est Patre, sed ex eo quod est aequalis, exaudit," et ita possumus orare Christum.

8 Quare ergo non dicitur, "Christe, ora pro nobis"?

20 9 Solutio: Non est dirigenda oratio ad Christum ne videamur consentire illorum haeresi qui dicebant Christum purum hominem, vel quod non sit ibi oranda divinitas.

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3 descendendum] decentium *Damasc.*

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2-3 Oratio ... Deum: Damascenus, *De fide orth.* 3.24 (PG 94:1089C); Burg., c. 68.1 (p. 267).

3 petitio ... Deo: Damascenus, *ibid.*

6-7 pius ... Deum: Alcher Clarevallensis, *De spiritu et littera*, c. 50 (PL 40:816); cf. Augustinum, *Epistola* 140.29.69 (CSEL 44:217): "Sed quia necesse habet rationalis creatura obtemperans deo temporales causas ad aeternum ueritatem referre siue petendo ..., siue consulendo, ... qui pius mentis affectus est, ut ipsa construat, non ut deus instruatur."

17-18 Ex ... exaudit: cf. Augustinum, *Epistola* 137.12 (CSEL 44:111; PL 33:520-21): "Verbum igitur dei idemque dei filius patri coaeternus ... suscepit hominem seque et illo fecit unum Iesum Christum, mediatorem dei et hominum, aequalem patri secundum diuinitatem, minorem autem patre secundum carnem, hoc est secundum hominem. ..."

10 Ad primum [5] dicendum quod oratio debet fieri cum devotione, dilectione, et fide, et ideo distincte oranda est Trinitas.

25 11 Ad aliud [2] dicendum qualis est fides, talis est oratio. Unde Jacobus, postulans in fide omnipotentiae Dei, et quia fides indistincta fuit in antiquis patribus, ideo indistincte orabant.

12 Ad aliud [3] dicendum quod aliqua distinguuntur in Spiritum sanctum, aliqua non, quare non oramus Spiritum Sanctum.

30 13 Item, in oratione sunt tria, scilicet, a quo petitur, et quid petitur, et cui. Unde cum in omni oratione petatur donum Spiritus Sancti et non Spiritus Sanctus, ad ipsum non dirigitur oratio, immo ad Datorem.

14 Contra: Spiritus Sanctus dat se et tota Trinitas dat Spiritum Sanctum.

15 Solutio: Quaedam oratio est immediata, et talis fit Spiritui Sancto; 35 quaedam mediata, ut in omnibus collectis, et ideo non Spiritui Sancto collectae fiunt. Unde primae orationes respiciunt increatum, secundae creatum.

16 Item, dedicatur in honore <Filii et> in honore Spiritus Sancti; quare non in honore Patris?

40 17 Solutio: Filius apparuit nobis in corporali specie, similiter Spiritus Sanctus, Pater non, et ideo locus non appropriatur Patri.

[...]

<ll. 75-80>

18 Item, qualiter terminari debent orationes sic scire possumus: aut dirigitur oratio ad totam Trinitatem indistincte aut ad aliquam <personam> distincte. Si primo modo, tunc subiungitur: "Qui vivis et regnas, Deus."

45 Si vero distincte et ad Patrem, tunc aut cum intentione alterius personae aut non. Si cum et omni, aut cum intentione alterius, aut cum intentione personae Filii, et tunc subiungitur: "Per eundem" etc., aut cum intentione Spiritus Sancti, et tunc subiungitur: "in unitate Spiritus Sancti." Si sine intentione alterius personae, tunc subiungitur: "Per Dominum nostrum" 50 Jesum Christum."

[...]

<105ra, ll. 19-22>

19 Item, cum Christus sit minister et auctor nostrae salutis, sicut dicitur: "Fili Dei, miserere," ita deberet dici, "Sancte Christe, ora pro nobis," nisi oretur dupliciter.

20 Solutio: Posset dici, sed non dicitur propter haeresim Arianam, ne 55 credatur minor Patre, et praeterea omnis qui oratur nominatur secundum maximam suam dignitatem.

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THREE PREVIOUSLY UNPUBLISHED CHAPTERS  
FROM ST. THOMAS AQUINAS'S COMMENTARY  
ON ARISTOTLE'S *METEORA*:  
*SENTENCIA SUPER METEORA* 2.13-15\*

*Kevin White*

INTRODUCTION

IN a study of the manuscript tradition of St. Thomas Aquinas's commentary on Aristotle's *Meteora* which was published in 1966,<sup>1</sup> A. Dondaine, O.P., and L. J. Bataillon, O.P., showed that this commentary includes three chapters, attested to by a number of manuscript witnesses, which have never appeared in any printed edition. Since the following first edition of these chapters—which constitute a commentary on Aristotle's discussion of earthquakes in *Meteora* 2.7-8 (365a14-369a9)—has been prepared on the basis of this study by Dondaine and Bataillon, let us begin by summarizing their argument for the authenticity of this section of Thomas's *Sentencia super Meteora*.

AUTHENTICITY

According to thirteenth- and fourteenth-century catalogues of his works, Thomas commented on "two books" or, more precisely, on "the first and second books" of the *Meteora*.<sup>2</sup> However, the early printed tradition of his

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<sup>1</sup> A. Dondaine and L. J. Bataillon, "Le commentaire de saint Thomas sur les Météores," *Archivum fratrum praedicatorum* 36 (1966): 81-152.

<sup>2</sup> The catalogue attributed to Reginald of Piperno has an entry "Super duos libros meteororum"; that of Nicolas Trevet says, more precisely, "Exposuit etiam libros Philosophiae plurimos, puta, . . . Meteorum, primum et secundum." See Dondaine and Bataillon, "Le



commentary, culminating in the Piana edition of 1570, presents a discussion of all four books of the *Meteora* which is indiscriminately composed of a Thomistic and a non-Thomistic part. The extent of the authentic portion of the Piana text was gradually determined, first by Jacques Échard, who in 1719 established that the commentary on books 3 and 4 was not by Thomas,<sup>3</sup> and then by the Leonine editors of the work, who in 1886 showed that the authentic part of the Piana text ends with the tenth chapter of commentary on book 2, that is, with the discussion of *Meteora* 2.5. The Leonine editors also, however, left open the possibility that Thomas's original commentary might have gone beyond *Meteora* 2.5, citing a marginal gloss from Vatican City, Biblioteca Apostolica Vaticana Vat. lat. 2072 which attributes a comment on *Meteora* 2.8 to *Expositor*—the medieval epithet for Thomas the Aristotelian commentator—as an apparent, though not conclusive, indication that Thomas did, as the medieval cataloguers suggest, comment on the whole of book 2.<sup>4</sup> In 1920, A. Pelzer drew attention to Vat. lat. 6758, which contains the commentary by Thomas to the end of 2.5, a commentary on 2.6 written in a different hand and attributed to Peter of Auvergne, and a commentary on 2.7-8 copied by the original scribe and including the glossal comment of Vat. lat. 2072 noted by the Leonine editors.<sup>5</sup> Although Pelzer presented this last coincidence as conclusive evidence that the commentary on 2.7-8 is by Thomas, Dondaine and Bataillon, in their study of 1966, were more cautious, pointing out that the attribution of the glossal comment to *Expositor* in Vat. lat. 2072 merely shows that the glossator *believed* in the Thomistic origin of the remark he cites.<sup>6</sup> In support of Pelzer's conclusion, however, Dondaine and Bataillon, making use of their much greater knowledge of the manuscript tradition, offered a more rigorous argument for the Thomistic authorship of the commentary on 2.7-8 in Vat. lat. 6758.

Taking advantage of researches by the Leonine Commission during the 1950s, which had identified ten principal and two occasional manuscript witnesses to the text of Thomas's *Super Meteora*,<sup>7</sup> Dondaine and Bataillon

commentaire," 101; and P. Mandonnet, *Des écrits authentiques de s. Thomas d'Aquin* (Fribourg, 1910), 31 and 49.

<sup>3</sup> See Dondaine and Bataillon, "Le commentaire," 101, which refers to J. Quétif and J. Échard, *Scriptores Ordinis Praedicatorum* (Paris, 1719), 1:284b.

<sup>4</sup> See St. Thomas Aquinas, *Opera omnia*, ed. Fratres Ordinis Praedicatorum, vol. 3 (Rome, 1886), Preface, p. xxxvii; Dondaine and Bataillon, "Le commentaire," 82 and 102.

<sup>5</sup> A. Pelzer, "L'édition Léonine de la Somme contre les Gentils," *Revue néoscholastique de philosophie* 22 (1920): 220-21; Dondaine and Bataillon, "Le commentaire," 102.

<sup>6</sup> Dondaine and Bataillon, "Le commentaire," 102.

<sup>7</sup> For a description of the codices, see *ibid.*, 83-96. Our references to the witnesses to the *Super Meteora* will conform to those of Dondaine and Bataillon, as follows:

based their argument on a minute analysis of each of the ten principal witnesses into its components. The first step consists in the identification of notable points of convergence and divergence within the tradition. Until almost the end of the commentary on 2.5—the terminus of the authentic portion of the printed text—there is no major divergence among the manuscripts: although some of the witnesses to this section are incomplete, all ten manuscripts present the same, authentically Thomistic commentary for this part of the text.<sup>8</sup> Seven of the principal manuscripts (*BMNOPSV*), however, also include commentary on all or part of the remaining section of the *Meteora* (2.6-4.12), but no two of them have exactly the same text for this latter portion. The dispersal of the tradition begins with 2.6: five of the manuscripts (*BMOSV*) present four different commentaries on this chapter (*M* and *O* have the same text), one of which (that in *V*) is attributed to Peter of Auvergne and another (that in *S*) to William of Quilebec; a sixth manuscript (*P*) omits any commentary on 2.6, passing directly from 2.5 to 2.7. With respect to 2.7-8, however, there is a remarkable unity in the tradition: *all* of the six manuscripts (*BMOPSV*) which contain a commentary on these two chapters present the same text. After 2.8 there is once again dispersion. One manuscript (*V*) goes no further. Another (*P*)

*B* = Bruges, Bibliothèque de la Ville 496, fols. 1ra-29ra

*M* = Madrid, Biblioteca Nacional 1427, fols. 127ra-141vb (presents the text of the Moerbeke translation of the *Meteora* with the commentary in the margins)

*N* = Naples, Biblioteca Nazionale VII C 9, fols. 123vb-133vb (some folios have been removed between fols. 133 and 134)

*O* = Oxford, Bodleian Library Canon. Misc. 175, fols. 1ra-25va

*O*<sup>1</sup> = Oxford, Balliol College 278, fols. 178ra-193ra

*P* = Paris, Bibliothèque Nationale lat. 16097, fols. 128ra-148vb, 185ra

*S* = Seville, Biblioteca Capitular y Colombina 7.7.23, fols. 2ra-34ra (the copyist of this manuscript dates the completion of his work in 1455; Fernand Columbus writes at the end of the codex that he purchased it at Padua on 4 April 1531)

*T* = Troyes, Bibliothèque Municipale 884, fols. 35ra-48va

*V* = Vatican City, Biblioteca Apostolica Vaticana Vat. lat. 6758, fols. 84ra-102va

*V*<sup>1</sup> = Vatican City, Biblioteca Apostolica Vaticana Vat. lat. 846, fols. 69ra-86rb

In addition to these ten continuous witnesses, two other manuscripts present the Moerbeke translation of the *Meteora* with selected marginal glosses from Thomas's commentary:

*C* = Cambridge, Fitzwilliam Museum McClean 155, fols. 128vb-136rb

*V*<sup>2</sup> = Vatican City, Biblioteca Apostolica Vaticana Vat. lat. 2072, fols. 128vb-175vb

Although much of my study of these manuscripts has been based on the microfilm collection of the Leonine Commission, I have also examined each of the originals. The only manuscript witnesses consulted by the Leonine editors of the *Super Meteora* were *O*<sup>1</sup> and *V*<sup>1</sup>.

<sup>8</sup> In fact, the agreement between the manuscript tradition and the printed text stops several lines before the end of *Super Meteora* 2.10: it ends with the words "supponendo quod" in section 6 of the Leonine edition of this chapter. See Dondaine and Bataillon, "Le commentaire," 83 and 144.

includes, as a later addition, the commentary of Peter of Auvergne on 2.9-4.12. Four manuscripts (*BMOS*) present the same commentary on 2.9, a commentary which, as evidence in *S* shows, is certainly not by Thomas;<sup>9</sup> in three cases (*MOS*) this commentary extends into book 3,<sup>10</sup> and in the fourth (*B*) the commentary on 2.9 is an insertion into a manuscript that had already contained another commentary on 2.9. Finally, the lack of unanimity continues among those manuscripts (*MNOPS*) which include commentary on books 3 and 4.<sup>11</sup>

Dondaine and Bataillon argue that the most plausible explanation of this pattern of divergence in 2.6, convergence in 2.7-8, and divergence once again in 2.9 ff., is that the archetype of the tradition contained a commentary on *Meteora* 1.1-2.5 and 2.7-8 only; the divergences in 2.6 and 2.9 ff. are then explained by various attempts to fill in the two lacunae for readers wishing to have a more complete discussion of the Aristotelian text. The agreement of the six witnesses to the commentary on 2.7-8 *after* the dispersal in 2.6 is particularly difficult to account for without this hypothesis. This agreement, then, points to the conclusion that the commentary on 2.7-8 in *BMOPSV* originally belonged together with the commentary on 1.1-2.5 as part of Thomas's *Sententia super Meteora*.<sup>12</sup>

This conclusion is confirmed by the second step of the argument, an "internal" critique based on the identification of certain literary formulae typical of Thomas the Expositor, such as his use of *hic* to introduce a chapter of commentary, his habitual ways of presenting a *divisio textus*, and his characteristic verbs of exposition.<sup>13</sup> In contrast to the various commentaries on 2.6, the commentary on 2.7-8 contains all of the typically Thomistic traits noted by Dondaine and Bataillon and no counterindication of Thomas's authorship. Thus, when added to the argument from the gloss cited by the Leonine editors and by Pelzer, and to the argument from the agreement

<sup>9</sup> In *S*, fol. 34ra, this commentary begins with a "letter-preface" (transcribed by Dondaine and Bataillon, *ibid.*, 150) which reveals its author to be a "continuator" of Thomas's commentary; see *ibid.*, 122.

<sup>10</sup> In *O* and *S* it continues to the end of book 3; in *M* it is replaced, early in book 3, by Peter of Auvergne's commentary.

<sup>11</sup> See Dondaine and Bataillon, "Le commentaire," 117-40.

<sup>12</sup> *Ibid.*, 106.

<sup>13</sup> Dondaine and Bataillon (*ibid.*, 113) identify the following "clefs du style" of Thomas the Expositor: the adverb *hic* in introductions to commentary-chapters; the preposition *circa*, sometimes in association with *primum*; the use of "dicit," "ponit," "ostendit," "assignat," "determinat," and "manifestat" as the most frequent verbs of exposition; certain habitual formulas of division, such as "et circa hoc duo (tria) facit: primo . . ." and "circa primum duo (tria) facit . . ."; formulas of introduction of secondary lemmas, such as "Deinde cum dicit . . . (*verb*) . . . et dicit quod . . ."; and such formulas as "Dicit ergo primo quod" and "assignat causam."

Dondaine and Bataillon went on to discuss the various “continuations” of the commentary,<sup>15</sup> but these do not concern us here. It may be useful, however, to reproduce the diagram by means of which they summarized their interpretation of the manuscript tradition as a whole:<sup>16</sup>

_____	<i>Sententia super Meteora</i> of St. Thomas.
- - - -	<i>Lectura</i> of William of Quilebeç, whose commentary on 2.6 in <i>S</i> is explicitly attributed to him.
++++++	commentary of Peter of Auvergne, whose commentary on 2.6 in <i>V</i> is explicitly attributed to him.
>>>>>	anonymous commentary on 2.6 in <i>M</i> and <i>O</i> .
<<<<<	anonymous commentary on book 3 in <i>N</i> .
o o o o	commentary by an anonymous Norman on 2.9 and book 3 ; in <i>S</i> this commentary is introduced by a letter indicating that it was composed during a vacation at the University of Paris on the occasion of the <i>regalia</i> of Philip, son of the deceased King Louis; Dondaine and Bataillon ("Le commentaire," 123-24) tentatively suggest the identification of the author with William of Quilebeç.
.....	anonymous commentary on 2.6 and 2.9 in <i>B</i> .

<sup>16</sup> Ibid., 109. The format has been slightly modified.

Although the diagram is clear enough as it stands, a number of points should be kept in mind for its interpretation. The premature terminations of Thomas's text in *O*<sup>1</sup> and *V*<sup>1</sup> are due to abrupt cessation of work by the respective scribes. In *N*, by contrast, the lacuna between 2.2 (355b1) and book 3 was caused by the removal of several folios which may well have included the commentary on 2.7-8. The second commentary on 2.9 in *B* and the continuation borrowed from Peter of Auvergne in *P* are later additions to the manuscripts. The commentary in *P* passes directly from 2.5 to 2.7 with no indication of the absence of comment on 2.6. The commentary of Peter of Auvergne in *M* and *P* continues to the end of book 4. Both *O* and *S* also include commentaries on book 4: Dondaine and Bataillon attributed that in *O* to Siger of Brabant<sup>17</sup> and that in *S* to James of Douai.<sup>18</sup>

While it is possible that Thomas composed a commentary on 2.6 which was quickly lost or suppressed, the evidence suggests rather that he passed directly from 2.5 to 2.7 (a move reflected in *P*) and then broke off his discussion of the *Meteora* after reaching the end of 2.8. Since his text of Aristotle certainly included 2.6, to which he refers in discussing 2.5,<sup>19</sup> this instance, unique among his Aristotelian commentaries, of jumping ahead in the text of Aristotle, calls for some explanation: perhaps he found 2.6—a technical discussion of the various winds, which constantly uses their Greek names, even in Moerbeke's translation, and refers to Aristotle's diagram of the windrose—either too uninteresting or too intricate to examine in detail. Thomas's abandonment of the commentary at the end of 2.8 might be attributed to a loss of interest in the *Meteora* as a whole, or to the pressure of other tasks, or again, in keeping with the late date assigned to the commentary by some historians,<sup>20</sup> to Thomas's complete cessation of writing towards the end of his life.

As has already been indicated, Thomas's exposition of *Meteora* 2.1-5 occupies the first ten chapters of his commentary on book 2. Since three of the four commentaries used to complete the first lacuna in Thomas's

<sup>17</sup> Ibid., 133-40.

<sup>18</sup> Ibid., 127-33.

<sup>19</sup> See *Super Meteora* 2.7 n.1 (St. Thomas Aquinas, *Opera omnia* [Rome, 1882-] [= Leonine edition], 3:409): "Prima iterum dividitur in duas: in prima determinat de ventis in communi; in secunda de speciebus ventorum, ibi: *De positione* etc." *De positione* marks the beginning of *Meteora* 2.6.

<sup>20</sup> See J. A. Weisheipl, *Friar Thomas d'Aquino: His Life, Thought, and Works*, with Corrigenda and Addenda (Washington, 1983), 317: "The unfinished commentary on the *Meteora*, terminating with Book II, 8, 369a9, might also have been written at Naples (sc. during 1272-73), although Mandonnet and Grabmann believe it to have been composed in Paris, 1269-72, while Pelster believes it to be of Neapolitan origin."

text consist of two chapters of commentary,<sup>21</sup> we shall assume that Thomas's discussion of 2.6 would likewise have been divided into two parts, namely an eleventh and a twelfth chapter of commentary on book 2. Accordingly, although neither Thomas nor the manuscript tradition numbers the chapters of his commentary, we shall refer to the three chapters on *Meteora* 2.7-8 as *Sentencia super Meteora* 2.13-15, with the understanding that chapters 11 and 12 were probably never composed.

With the authenticity of these chapters solidly established by Dondaine and Bataillon, the following edition of them has been prepared from the six principal witnesses and the occasional testimony of the marginal glosses in *V*<sup>2</sup>. In order to set this evidence in its widest possible context, however, we have also made a preliminary examination of the manuscript tradition as a whole.

#### PRELIMINARY CRITIQUE OF THE MANUSCRIPT TRADITION

A first indication of the remarkable unity of the manuscript tradition may be detected in two common accidents pertaining to the commentary's division into chapters. In order to facilitate rapid orientation in the commentary and coordination with the Aristotelian text, it is customary for the manuscripts of Thomas's Aristotelian commentaries to distinguish the beginning of each new commentary-chapter visually by an alinea, often together with an enlarged and decorated initial letter or paragraph sign, and/or underlining of the lemma (the first few words of the Aristotelian text to be discussed) by which Thomas begins his chapter. (In general, the initial letter was not—at least not immediately—drawn by the scribe, who simply left a small marginal indication of the correct letter and a blank space to be filled in later; in many cases this space was never filled in.) Nine of the ten principal witnesses to the *Super Meteora* (*BNOO<sup>1</sup>PSTVV<sup>1</sup>*)<sup>22</sup> clearly indicate the commentary-chapter divisions in some such way. Now of these nine, only one—*V*, which, as we shall see, also distinguishes itself in other ways—presents all of the divisions indicated in the printed text, up to and including the beginning of *Super Meteora* 2.10. *All* of the eight

<sup>21</sup> Of the four commentaries on 2.6 (363a20-365a13), only the *reportatio* of William of Quilebec in *S*, fols. 27vb-30rb, does not clearly divide into two chapters. Both the commentary of Peter of Auvergne in *V*, fols. 98vb-100ra, and the anonymous commentary in *B*, fols. 23ra-24ra, divide 2.6 at 365a4: *Essendi autem plures uentos . . .* (*V*, fol. 99ra; *B*, fol. 23vb). By contrast, the anonymous commentary in *O*, fols. 20vb-22vb—which is also present, but not clearly divided, in the margins of *M*, fols. 139ra-140ra—divides 2.6 at 364a27: *Sic autem ordinatis . . .* (*O*, fol. 21vb).

<sup>22</sup> As the preceding note suggests, the commentary chapters are not clearly distinguished in the marginal commentary in *M*.

other principal witnesses (*BNOO<sup>1</sup>PSTV<sup>1</sup>*), which usually indicate the chapter beginning with an alinea and a large decorated initial letter, fail to do so in both chapters 3 and 10 of *Super Meteora* 1: in chapter 3, the introductory Aristotelian words are at least set off by underlining; in chapter 10, however, the fact that both the opening words from Aristotle ("Omnibus autem hiis") and the opening words of Thomas's commentary-chapter ("Positis opinionibus") are in the ablative plural apparently led to a misreading in which Aristotle's words were taken as Thomas's (as if Thomas were saying "Omnibus autem hiis positis opinionibus"), so that the lemma is not even set off by underlining. These two points of coincidence among the eight witnesses no doubt reflect a common source which also lacked clear indications of the beginnings of chapters 3 and 10 of book 1.

Might this common source be an official University of Paris exemplar? This hypothesis is suggested by the presence in two of the eight manuscripts (*NO*) of marginal indications of a division into *peciae* and by implicit *pecia* divisions in at least one other manuscript (*O<sup>1</sup>*). The fact that the two known Parisian stationers' lists, of 1275 and of 25 February 1304, both omit mention of the *Super Meteora*<sup>23</sup> may mean that the text was available for copying only sometime after the latter date. In any event, *pecia* divisions clearly occur at the following points:

*Pecia* 2: "propter humiditatem est quasi in potentia ad aquam; exhalatio autem propter siccitatem est quasi in potentia ut igniatur" (*Super Meteora* 1.4 n.6, Leonine edition 3:337). There are marginal indications in *N*, fol. 125vb (·:·) and in *O*, fol. 3vb (.2. p<sup>a</sup>). (For "exhalatio," *N* has "ex alio alatio.")

*Pecia* 3: "temporis solis de nocte ad horizontem / propter magnitudinem decisionis" (1.10 n.5). There are marginal indications in *N*, fol. 172ra (·:·) and at the top of *O*, fol. 7ra (.3. p<sup>a</sup>). In *O<sup>1</sup>*, between the last line of fol. 182rb and the first line (beginning "propter magnitudinem decisionis") of fol. 182va, a passage of some forty words has been omitted, which, however, has been supplied by the scribe in the lower margin of fol. 182rb. In *T*, the twenty-first line of fol. 38va begins with a sign (⊢) which may be a *pecia* indication; the line, which is therefore slightly indented, reads "-ciam eius que est tunc temporis solis ad de nocte ad orizontem propter magnitudinem."

*Pecia* 4: "alio modo per hoc quod calor qui est in vapore extinguitur propter hoc quod longe elevatur a terra in aere qui est supra terram, ubi

<sup>23</sup> For a discussion of these lists and their contents, see L. J. Bataillon, "Les textes théologiques et philosophiques diffusés à Paris par *exemplar* et *pecia*" in *La production du livre universitaire au Moyen Age: Exemplar et pecia*, ed. L. J. Bataillon, B. G. Guyot, and R. H. Rouse (Paris, 1988), 155-63.

deficit calor propter hoc quod radii reverberati" (1.14 n.5). There is a marginal indication in *N*, fol. 129ra (·:·). There is *no* marginal indication .4. p<sup>a</sup> in *O*; fol. 9va in *O* begins with "calor qui est. . . ." In *O*<sup>l</sup>, fol. 184va, fifth line from the bottom, the pen has been sharpened between "terram" and "ubi."

*Pecia* 5: "ut ex hoc possit accidere fluxus fluviorum. Non enim / magis possumus / dicere quod aquae, si quae collectae invenitur" (1.16 n.8). There are marginal indications in *N*, fol. 131ra (·:·) and in *O*, fol. 12ra (.5. p<sup>a</sup>). In *O*<sup>l</sup>, fol. 186vb, between line 38 and line 39—the latter of which begins "magis possumus dicere . . ."—a passage of about a hundred words has been omitted which the scribe has supplied in the lower margin; since "magis possumus" occurs both at the conclusion of this passage and at the beginning of line 39, it may have been a catch-phrase found both at the end of *pecia* 4 and at the beginning of *pecia* 5.

*Pecia* 6: "sicut et Tartarus fluctuans tendit ad omnem partem. Et sic accidet / illud quod dicitur in proverbio" (2.3 n.4). This text occurs in the section of *N* that has been removed. There is a marginal indication in *O*, fol. 14vb (6 p<sup>a</sup>). In *V*<sup>l</sup>, fol. 83rb, line 15, "illud" is written with a sharpened pen. In *O*<sup>l</sup>, fol. 189ra, sixth line from the bottom, there is a point between "accidet" and "illud."

Although there are no further explicit *pecia* indications in *O* (and any which had been in *N* would have occurred in the folios that have been removed), it seems likely that there were two other divisions in the exemplar. All of the first five *peciae* are of approximately equal length. In *O*, for example, whose writing is very regular in size, *peciae* 1 and 2 take up about twelve columns each, *pecia* 3 about ten columns, and *peciae* 4 and 5 about eleven columns each. From the start of *pecia* 6 to the end of *Super Meteora* 2.10, the text in *O* occupies twenty-three and a half columns, that is, if the *peciae* are consistent in length, approximately two *peciae*, while *Super Meteora* 2.13-15 occupies eleven columns, or about the length of one *pecia*. It seems quite probable, then, that a seventh *pecia* began around the beginning of *Super Meteora* 2.10 and an eighth around the beginning of 2.13. It could even be that 2.13-15, the portion edited here, constituted a separate *pecia*, and the fact that *T* does not have this section may mean that the scribe of *T* did not have access to this *pecia*.

With a view to establishing a stemma of the manuscript tradition, I have collated all the witnesses to *pecia* 1 (which comprises nearly the first four chapters of the commentary) and to the tenth chapter of book 1 (which marks the transition from *pecia* 2 to *pecia* 3) against the Leonine text. The following are the general results of these soundings.



Taking the sounding of *pecia* 1, and momentarily setting aside the late (fifteenth-century) testimony of *S*, we are confronted by a fairly homogenous group of late thirteenth- and early fourteenth-century witnesses (*BM NOO<sup>1</sup>PTVV<sup>1</sup>C*).<sup>24</sup> An initial grouping of these is suggested by a series of approximately fifty-five variants which distinguish *PV* and, where present, the occasional witness of *C*, from the seven others (*BMNOO<sup>1</sup>TV<sup>1</sup>*). In many cases these variants are relatively insignificant and do not immediately suggest a superiority of one group over the other. There are, however, about twenty instances in which the reading of *PV(C)* is for some reason preferable to that of *BMNOO<sup>1</sup>TV<sup>1</sup>*, as against only five instances of the contrary. This impression of the overall superiority of *PV(C)*, together with the fact that the other group includes the two "*pecia* manuscripts" *NO*, might suggest that *PV(C)* represents an "independent" tradition as distinct from a "university" tradition represented by *BMNOO<sup>1</sup>TV<sup>1</sup>*. It should be noted, however, that most—but not all—instances of apparent superiority in *PV(C)* can be explained by corrections of the university tradition made on the basis of context, consultation of the Aristotelian text, or stylistic considerations. In order to illustrate these remarks, let us briefly consider four notable variants occurring in the first chapter.

The first variation between the two groups is found in the opening sentence of the commentary:

Sicut in rebus naturalibus nihil est perfectum dum est in potentia, sed solum tunc perfectum est, quando est in ultimo actu; quando vero medio modo se habens fuerit inter puram potentiam et purum actum, tunc est quidem secundum quid perfectum, non tamen simpliciter; sic et circa scientiam accidit.

(1.1 n.1. Cf. *B*, fol. 1ra; *M*, fol. 127ra; *N*, fol. 122vb; *O*, fol. 1ra; *O<sup>1</sup>*, fol. 178ra; *P*, fol. 128ra; *T*, fol. 35ra; *V*, fol. 84ra; *V<sup>1</sup>*, fol. 69ra; *C*, fol. 128vb, mg.)

quando vero . . . fuerit] quando vero cum medio modo se habens fuerit  
*BMNOO<sup>1</sup>TV<sup>1</sup>*: quando vero est medio modo se habens *PVC*

Although the difference between "cum" (accompanied by "fuerit") in *BM NOO<sup>1</sup>TV<sup>1</sup>* and "est" (without "fuerit") in *PVC* is readily explained by a scribal confusion between *c̄* ("cum") and *ē* ("est"), the problem is to determine which of the two readings represents the confusion. While both are possible, it might be argued that the "est" in *PVC* is more consistent with the five

<sup>24</sup> This dating is based on Dondaine and Bataillon, "Le commentaire," 83-96, and has been confirmed by Professor R. H. Rouse, who kindly shared his expert knowledge of codices with me in a discussion of the manuscripts.

*V<sup>2</sup>* is omitted from our consideration of *pecia* 1 because none of the marginal glosses in the corresponding portion of *V<sup>2</sup>* is taken from Thomas's commentary.

other occurrences of “est” in this sentence, and that the more awkward text of *BMNOO<sup>1</sup>TV<sup>1</sup>* is to be explained by a misreading of “cum” for “est” which left the clause in need of a verb and hence occasioned the addition of “fuerit.” On the other hand, it need not be assumed that the more elegant reading corresponds to the original text: is it not also possible that the reading of *PVC* represents the effort of a corrector to make the “university” text smoother?

Another instance of stylistic variation between the two groups occurs a bit later in the text:

Unde manifestum est quod complementum scientiae requirit quod non sistatur in communibus, sed procedatur usque ad species. . . .

(1.1 n.1. Cf. *B*, fol. 1ra; *M*, fol. 127ra; *N*, fol. 122vb; *O*, fol. 1ra; *O<sup>1</sup>*, fol. 178ra; *P*, fol. 128ra; *T*, fol. 35ra; *V*, fol. 84ra; *V<sup>1</sup>*, fol. 69ra; *C*, fol. 128vb, mg.)

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quod] ad *add. PVC*      requirit] requiritur *PVC*      sistatur] sistat *O<sup>1</sup>*  
 procedatur] procedat *BMNOO<sup>1</sup>TV<sup>1</sup>*

Where *PVC* has “ad” and the passive “requiritur,” the other group has merely the active “requirit”; and where *PVC* correlates the two passive verbs “sistatur” and “procedatur,” the other group has an awkward mix of passive and active verbs (“sistatur,” “procedat”) or, in the case of *O<sup>1</sup>*, two active verbs (“sistat,” “procedat”). Does the superior elegance of *PVC* with respect to both points signify a greater fidelity to the archetype, or can it as easily be explained as the result of a corrector’s effort to provide a smoother, more readable text? As yet, it is difficult to say.

These two examples of stylistic difference between the two groups occur in the opening passage of the commentary, before the discussion of the Aristotelian text has begun. Later in the first chapter, after Thomas has taken up the exposition of the text, there is a different kind of variant concerning the explanation of Aristotle’s remark, “Et quaecumque ponemus utique aeris esse communes passiones et aquae” (*Meteora* 1.1 [338b24-25]). According to the Leonine edition, the commentary on this passage is as follows:

Secundo cum dicit: *Et quaecumque ponemus* etc., enumerat ea quae sub praedictis fiunt: scilicet quaecumque ponuntur esse passiones communes aeris et aquae, quia ex materia aquea in loco aeris generantur, vaporibus in aquam transmutatis.

(1.1 n.6. Cf. *B*, fol. 1va; *M*, fol. 127ra; *N*, fol. 122vb; *O*, fol. 1ra; *O<sup>1</sup>*, fol. 178ra; *P*, fol. 128rb; *T*, fol. 35rb; *V*, fol. 84ra; *V<sup>1</sup>*, fol. 69rb; *C*, fol. 129ra, mg.)

passiones communes] communes passionēs *BTVV*<sup>1</sup>: 9<sup>o</sup>cies p<sup>o</sup>anes *P*: *spatium*  
*10 litt. NOO*<sup>1</sup> (*postea supplevit* communes passionēs *O*<sup>1</sup>): *om. M aquae*]  
 scilicet pluviae, nives, grandines et alia (alia *om. V*) huiusmodi quae dicuntur  
 esse communes passionēs aeris et aquae *add. PV* (*cf. C*: Nota quod communes  
 passionēs sunt pluviae, nives et grandines . . .)

The striking difference between the two groups here is that while *BM NOO*<sup>1</sup>*TV*<sup>1</sup>, like the Leonine text, passes directly from “aquae” to “quia,” *PV* interposes between these two words a particularizing explanation of Aristotle’s general reference to *communes passionēs*, an explanation similar to that in the marginal note of *C*. Does this explanation belong to the commentary or is it an interpolation in *PV*? A number of considerations seem to favour the former interpretation. First of all, the specifying clarification of Aristotle’s general remark is typical of the method of Thomas’s Aristotelian commentaries. Second, Alexander of Aphrodisias’s commentary on the *Meteora*, which Thomas certainly consulted in composing his own commentary,<sup>25</sup> contains a different, but similarly particularizing explanation of Aristotle’s remark; but whereas Alexander takes the *passiones* which are “common to air and water” to be the visible phenomena, such as rainbows and halos (discussed in *Meteora* 3),<sup>26</sup> both the explanation in *PV* noted above and a slightly later passage in the *Super Meteora* differ, the former by interpreting the *communes passionēs* as the various kinds of precipitation treated in *Meteora* 1.9-13, and the latter by indicating that it is only a few lines after the remark about *communes passionēs* that Aristotle may be referring to the phenomena mentioned by Alexander.<sup>27</sup> Do not this later passage from Thomas’s commentary and the explanation in *PV* go together as a tacit correction of Alexander’s interpretation? Is it not likely that, having read Alexander’s interpretation of *communes passionēs*, Thomas would offer his own differing interpretation? In fact,

<sup>25</sup> See A. J. Smet, “Alexander van Aphrodisias en S. Thomas van Aquino: Bijdrage tot de Bronnenstudie van de Commentaar van S. Thomas op de *Meteorologica* van Aristoteles,” *Tijdschrift voor Philosophie* 21 (1959): 108-41.

<sup>26</sup> See *Alexandre d’Aphrodisias: Commentaire sur les Météores d’Aristote*, ed. A. J. Smet, *Corpus latinum commentariorum in Aristotelem graecorum* 4 (Louvain and Paris, 1968), 5.44-49: “Post quae ordinem habent *quaecumque communes passionēs [aeris]* esse videntur *aeris et aquae*. Haec autem sunt speculares imagines et perlustrationes; horum enim utrumque in aqua et aere. Per quae fiunt videlicet quae de vocatis virgis et parheliis, et de halo et iride, et si qua his similia sunt.”

<sup>27</sup> See *Super Meteora* 1.1 n.8 (Leonine edition 3:327), where Thomas is discussing the lemma *Adhuc autem de fulminum casu* etc. (339a2-5): “Vel potest hoc referri ad iridem et halonem (idest circulum continentem solem et lunam et stellas), quae accidunt ex reverberatione radiorum ad aliquam materiam spissam.”

would he not be more likely to do so than to omit any explanation whatsoever? And does the comment in *PV* not therefore have the appearance of a link with the archetype of the tradition which has been broken in *BMNOO<sup>1</sup>TV<sup>1</sup>*? It might be argued, on the other hand, that the comment in *PV* is the work of a corrector who has noticed that something is missing in his text and has filled in the lacuna on the basis of a careful consideration of the surrounding context in Thomas's commentary. However, the strong appearance of an omission by homoeoteleuton due to the repetition of "communes passiones aeris et aquae," in *BMNOO<sup>1</sup>TV<sup>1</sup>*, supports the simpler hypothesis that the comment did belong to Thomas's commentary and was preserved in *PV(C)* but lost in *BMNOO<sup>1</sup>TV<sup>1</sup>*.

Another striking variant which sets *PV* apart concerns Thomas's explanation of "typhonibus" (339a4), which is Moerbeke's rendering of the Greek τυφῶν:

Quarto ibi: *Adhuc autem de fulminum casu* etc., enumerat ea quae ex alto in infimum descendunt, ex ventis causata, dicens: *Adhuc autem dicemus de casu fulminum et typhonibus* (qui dicuntur *siphones*). . . .

(1.1 n.8. Cf. *B*, fol. 1vb; *M*, fol. 127ra; *N*, fol. 122vb; *O*, fol. 1ra; *O<sup>1</sup>*, fol. 178ra; *P*, fol. 128rb; *T*, fol. 35rb; *V*, fol. 84ra; *V<sup>1</sup>*, fol. 69va; *C*, fol. 129rb)

qui] vulgariter add. *PV*: spatium 12 litt. add. *NOTV<sup>1</sup>* qui . . . siphones]  
 spatium 12 litt. *M* siphones (suppl. ed. ex commentarium Olympiodori  
 super Meteora)] sciphi *BNO<sup>1</sup>TV<sup>1</sup>*: sophi *O*: ciphi *P*: scyphi *V*: scyfi *C*

That some word is required between "qui" and "dicuntur" is indicated not only by *PV* but also by the blank space in *NOTV<sup>1</sup>*. Is the "vulgariter" in *PV* correct? The answer to this question would seem to depend on the determination of the word which should follow "dicuntur." Since Thomas did not have access to the commentary of Olympiodorus, the conjecture "siphones" of the Leonine editors is unconvincing. On the other hand, the various readings in the manuscripts are also unlikely: *sciphus* (*scyphus*, *scyfus*), meaning "wine-cup," is an unlikely equivalent for *typho* ("whirlwind"), while "sophi" and "ciphi" are apparently unintelligible misreadings of "sciphi." Is it possible that "sciphi" is a misreading of *turbo*, the *sci* deriving from *tu*, the *p* from a lengthened *r*, and the *hi* from *bo*? *Turbo* is both the term corresponding to τυφῶν in the older translation of the *Meteora*<sup>28</sup>

<sup>28</sup> The mention of whirlwinds by Aristotle at 1.1 (339a2), the passage we are presently considering, is not transmitted at all in Gerard of Cremona's translation: see *Aristoteles' Meteorologie in arabischer und lateinischer Übersetzung: Textkritische Ausgabe des ersten Buches*, ed. P. L. Schoonheim (Leiden, 1978), 52.15. On the other hand, the section in Albert's *Meteora* corresponding to Aristotle's thematic discussion of whirlwinds in 2.9 uses *turbo*

and, in contrast to Moerbeke's transliterated *typho*, a common Latin term for "whirlwind" found, for example, in the Vulgate Bible.<sup>29</sup> This hypothesis gives the reading "vulgariter" cogency, since Thomas would then be drawing attention to the fact that *typho* is a graecism, and explaining it by the more common Latin equivalent *turbo*. His comment would then be very similar to his explanation in the *Summa theologiae* of the Greek term *herodionen* by the more common Latin word *falco*:

Per herodionen qui vulgariter falco dicitur, significantur illi . . . (ST 1-2.102.6 ad 1).

If the foregoing hypothesis is correct, then it is unlikely that the presence of "vulgariter" in *PV* was supplied by a corrector working from context, since these manuscripts present nonsensical misreadings of the clarifying word *turbo* similar to those of the other witnesses; rather, the "vulgariter" of the archetype has been accurately transmitted to *PV*, while it is illegible or absent for the copyists of all the other manuscripts. This, then, appears to be another special link between *PV* and the archetype which has been lost in *BMNOO<sup>1</sup>TV<sup>1</sup>*.

Despite this initial grouping of *P* with *V(C)*, there are about twenty cases in *pecia* 1 in which *P* is associated with *BMNOO<sup>1</sup>PV<sup>1</sup>* against *V(C)*, as well as a number of accidents proper to *P*. Some of the latter suggest that *P* may represent an intermediate state of correction between the "university" group and *V(C)*. *PV(C)* as a whole, then, perhaps reflects a gradual correction of the "university" text made with the help of an independent source.

Within the "university" group *BMNOO<sup>1</sup>TV<sup>1</sup>*, a subgroup *NOO<sup>1</sup>* may be defined not only by the presence of *pecia* indications in these three manuscripts, but also by a number of accidents proper to this group. *NOO<sup>1</sup>* seems to represent an early state of the university exemplar, later corrections of which are reflected in *BMTV<sup>1</sup>*.

Finally, the principal witness we have neglected so far, *S*, which is dated 1455, is a late witness to the text which is generally associated with the "university" group, but has some readings in common with *PV(C)*.

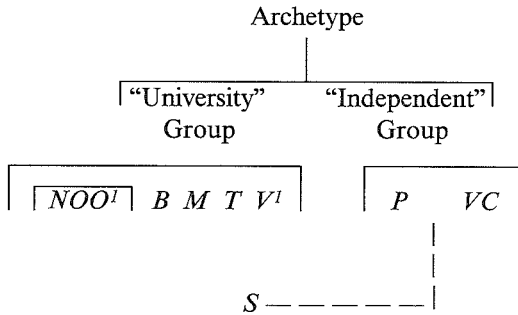
Our basic division between the groups *BMNOO<sup>1</sup>TV<sup>1</sup>* and *PV* is further confirmed by the sounding in *Super Meteora* 1.10: although the tradition is very homogenous at this point (which marks the transition from *pecia* 2

frequently and *typho* never: see Albert, *Meteora* 3.3.16 (*Opera omnia*, ed. A. Borgnet, 38 vols. [Paris, 1890-99], 4:655-57).

<sup>29</sup> Most notably with reference to the whirlwind in the Book of Job; see Thomas's comments in *Super Iob* 38 (Leonine edition 26:199.20-37).

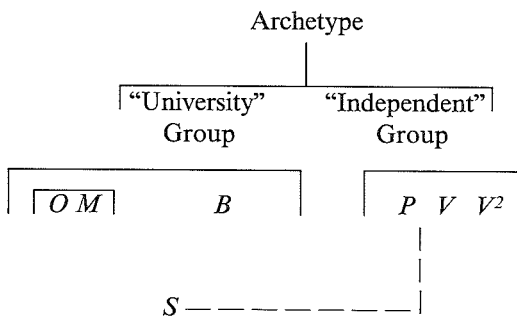
to *pecia* 3), there are ten notable accidents which distinguish *PV* from the other eight principal witnesses here.

The above observations indicate that the stemma of the manuscript tradition should be roughly as follows:



#### THE MANUSCRIPT TRADITION AND THE PRESENT EDITION

A collation of the six principal witnesses (*BMOPSV*) to *Super Meteora* 2.13-15 confirms the basic division between *PV* and the other manuscripts, since there are 66 variants proper to *PV* in this portion of the text. Three other points should be noted here: since there are 90 variants proper to *MO* in this section, this pair of manuscripts forms a subgroup within the "university" group here, one which seems to be further emphasized by the fact that *M* and *O* contain the same commentary on 2.6; the occasional witness of *V*<sup>2</sup> in this section suggests that it belongs with *PV* in the "independent" group; and *C* provides no witness to this part of the text. Accordingly, the stemma for the tradition of *Super Meteora* 2.13-15 will approximate the following:



As in *pecia* 1, *PV* seems to present a corrected version of the university text, but here most of the corrections can easily be explained by a consultation of the Aristotelian text or considerations of context and style.

There are about 300 instances in which *V* seems clearly superior to *P*, as against only about 50 instances of the contrary. *B* and *S* sometimes (as “university” texts) agree with *MO* against *PV*, sometimes (as representing a revised version of the university exemplar) agree with *PV* against *MO*, but often, since both were copied somewhat carelessly, each contains evident errors peculiar to itself. In establishing the text, then, *B* and *S* have generally been disregarded, *PV* is nearly always preferred to *MO*, and *V* is usually preferred to *P*—though a consultation of the *apparatus criticus* appended to Thomas’s text below will show exceptions to each of these guidelines. Finally, in choosing among variants, I have also consulted the Aristotelian text and the commentary of Alexander.

### THE TEXT OF ARISTOTLE

The version of the *Meteora* commented on by Thomas is that of William of Moerbeke. This translation was probably produced about the time of William’s translation of Alexander’s *Meteora* commentary, which was completed at Nicea on 24 April 1260.<sup>30</sup> It superseded the standard older translation, which comprised Gerard of Cremona’s translation from the Arabic of books 1-3 and Henricus Aristippus’s translation from the Greek of book 4,<sup>31</sup> and which had been commented on by Alfred of Sareschal, Adam of Buckfeld, and Albert the Great. Thomas seems to have been the first to comment on the Moerbeke translation of the *Meteora*.

Like all of his Aristotelian commentaries, the three chapters of Thomas’s *Super Meteora* edited here presuppose a reading of the text under discussion. Accordingly, since the Aristoteles Latinus series has not yet published a critical edition of the Moerbeke translation, an approximation to Thomas’s copy of the Moerbeke version of *Meteora* 2.7-8 (365a14-369a9) has been prepared for the present edition. The Aristotelian text as given in the Leonine edition<sup>32</sup> has been taken as a base text, with which the following have been compared: a few selected manuscript copies of the Moerbeke translation; the Greek text edited by F. H. Fobes (with particular attention to “J,” the ninth-century manuscript which was probably Moerbeke’s principal source);<sup>33</sup> and the commentary of Thomas as edited here.

<sup>30</sup> See Smet, *Alexandre d’Aphrodisias: Commentaire sur les Météores*, p. xi.

<sup>31</sup> See B. G. Dod, “Aristoteles Latinus” in *The Cambridge History of Later Medieval Philosophy*, ed. N. Kretzmann et al. (Cambridge, 1982), 76.

<sup>32</sup> See St. Thomas Aquinas, *Opera omnia*, vol. 3, pp. LXIX, LXXI-LXXIII, LXXVII-LXXVIII.

<sup>33</sup> In a letter to me dated 5 June 1988, Mme. Gudrun Vuillemin-Diem states that Moerbeke’s principal Greek manuscript for the *Meteora*—as for the *Physics* and *Metaphysics*—was

There are two manuscript traditions of Moerbeke's translation: an "independent" tradition, which survives in Toledo, Biblioteca del Cabildo 47.11, fols. 1r-44r (copied at Viterbo around 1280) [*T'*]; and a tradition stemming from the University of Paris exemplar, represented here principally by Paris, Bibl. Univ. 568, fols. 154r-174r [*P'*].<sup>34</sup> Both of these manuscripts have been collated for the whole of 365a14-369a9, and, in addition, three other "university" manuscripts have occasionally been consulted.<sup>35</sup>

Sometimes Thomas's text is evidently closer to the university exemplar than to the text copied at Viterbo: his text of *Meteora* 2.7, for example, began, like the Paris manuscript, with "De agitatione autem" rather than with the "De scissura autem" found in the Toledo manuscript; this variation perhaps comes from a double translation of *περὶ δὲ σεισμοῦ* proposed by Moerbeke, and from a misreading of "scissura" for a transliterated "seismo." Elsewhere, however, Thomas's text agrees with the Toledo manuscript against the university tradition, at least insofar as I have been able to determine the latter. The apparatus included with the Aristotelian text below gives selected variants intended to illustrate the situation of Thomas's Aristotelian text "between" these two traditions.

#### HISTORICAL CONTEXT

It would be interesting now to set these chapter of Thomas's *Super Meteora* in their historical context, that is, to trace in detail their sources, their relation to other texts of Thomas, and their influence. However, since our primary purpose here is to present the text itself, and since such historical considerations more properly belong to a study of the *Super Meteora* as a whole, the following brief sketch will have to suffice.

Thomas's principal source in these chapters, apart from the text of Aristotle, is the commentary of Alexander of Aphrodisias. As A. J. Smet has shown with respect to the already published portion of the *Super Meteora*, Thomas drew from Moerbeke's translation of Alexander's commentary without, however, mentioning Alexander's name.<sup>36</sup> It is not sur-

doubtless the ninth-century manuscript, Vienna, Österreichische Nationalbibliothek gr. 100, which F. H. Fobes refers to as "J" in his edition, *Aristotelis Meteorologicorum libri quattuor* (Hildesheim, 1967); see p. xl for a description of this manuscript.

<sup>34</sup> The distinction between these two traditions was pointed out by Mme. Vuillemin-Diem in the letter mentioned in the preceding note. On the Toledo manuscript, see Smet, *Alexandre d'Aphrodisias: Commentaire sur les Météores*, 1

<sup>35</sup> Two of these include, in addition to the text of Aristotle, marginal witnesses to Thomas's *Super Meteora* and have been referred to above (see n. 7) as *M* and *V*<sup>2</sup>; the third is Naples, Biblioteca Nazionale VIII E 43, fols. 215va-217ra [*N'*].

<sup>36</sup> See n. 25 above.



prising to find this unacknowledged use of Alexander's commentary continue in these last three chapters of the *Super Meteora*. Thomas's reliance on Alexander here is most striking in his discussion of a textual ambiguity at the end of *Super Meteora* 2.14,<sup>37</sup> but there are also smaller points of detail where the influence of Alexander can be seen. Wherever they have been identified, these instances of dependence have been noted in the *apparatus locorum* to Thomas's text.

In addition to Alexander's commentary, there was also available to Thomas a tradition of Latin commentaries on the older version of the *Meteora*, represented by the *notulae* of Alfred of Sareschal (ca. 1220), the literal commentary of Adam of Buckfeld (ca. 1250), and the *Meteora* of Albert the Great.<sup>38</sup> However, apart from certain principles of *divisio textus* which Thomas may have taken from Adam, and the double explanation of the phrase *eclipses lune* (367b20) which he seems to owe to Albert,<sup>39</sup> Thomas does not appear to have relied on the commentators of the *vetus* for his own understanding and exposition of Moerbeke's translation of *Meteora* 2.7-8.

Since Thomas found it worth his while to comment on *Meteora* 2.7-8, it might be asked whether his other writings reveal any interest in earthquakes and in Aristotle's explanation of them. According to Busa's *Index Thomisticus*, there are forty-six occurrences of the word *terraemotus* in other texts of Thomas.<sup>40</sup> Of these, nine are found in the Aristotelian commentaries and thirty-four in the scriptural commentaries; and of the latter, a full twenty-six are in the commentaries on Job (eleven occurrences) and Psalm 17 (fifteen occurrences). As these figures indicate, Thomas's references to earthquakes were usually occasioned by a text to be commented on, and more often by a scriptural than by a philosophical text. Furthermore, while it is true that one passage in *Super Iob* and one in *Super Psalmos* 17 refer to the Aristotelian explanation of earthquakes, both passages apparently rely on Albert's *Meteora* rather than on the text of Aristotle itself.<sup>41</sup>

<sup>37</sup> See below, *Super Meteora* 2.14, lines 252-65 *cum adn.*

<sup>38</sup> For Alfred, see J. K. Otte, *Alfred of Sareschal's Commentary on the Metheora of Aristotle: Critical Edition, Introduction, and Notes*, Studien und Texte zur Geistesgeschichte des Mittelalters 19 (Leiden, 1988). I have consulted Adam's commentary on *Meteora* 2.7-8 in two manuscripts: Vat. Urb. lat. 206, fols. 229va-231vb, and Florence, Biblioteca Nazionale B.V.256, fols. 211v-213r. For Albert, see *Opera omnia*, ed. Borgnet, vol. 4.

The continuity of this older tradition may be seen from the fact that, with respect to the discussions of *Meteora* 2.7-8, Adam frequently quotes Alfred, while Albert's outline of topics seems to follow Adam's *divisio textus* closely.

<sup>39</sup> See below, *Super Meteora* 2.14, lines 229-51 *cum adn.*

<sup>40</sup> See *Index Thomisticus: Concordantia prima*, 23 vols. (Stuttgart, 1974), 22:151, no. 81964, "TERRAEMOTUS."

<sup>41</sup> See Thomas Aquinas, *Super Iob* 9 (Leonine edition 26:59.147-52): "Ex corporibus autem

Finally, with respect to the influence of the three commentary-chapters edited here, it is clear that they had a number of copyists during the fifty years following Thomas's death, as well as one copyist—that of MS S—as late as 1455, and that they therefore enjoyed some readership before the authority of the printed tradition of the *Super Meteora*, starting with the *editio princeps* of 1532,<sup>42</sup> consigned them to oblivion by omitting them. At least one clear case of their influence in another medieval text can be identified, namely their status as a source in the corresponding section of an early French “translation” of the *Meteora* by Mahieu le Vilain.<sup>43</sup> This work, which presents itself as a translation but is in fact a paraphrase containing considerations from outside the text of Aristotle, certainly relies on Thomas's commentary for many points in its discussion of “les terres motes,” though without mentioning Thomas's name.<sup>44</sup> As Rolf Edgren, the

*mixtis transit ad elementa, inter quae firmissimum et stabilissimum videtur esse terra quae est immobilis sicut centrum motus totius, et tamen quandoque secundum aliquas partes suas movetur naturaliter ex vapore incluso, ut philosophi tradunt. . .*” Thomas's use of the term *vapor* here, rather than Moerbeke's *exalatio*, would seem to indicate the older version or one of its commentators as his source; and his reference to the *philosophi* in general rather than to Aristotle in particular suggests that he is drawing on Albert's discussion of earthquakes, which states, “Omnia autem quae dicta sunt de terraemotu summatim colligendo, intelligimus quod omnes fere Philosophi in hoc concordant, quod terraemotus causetur a vento in terra concluso” (Albert, *Meteora* 3.2.8 [ed. Borgnet, 4:623]).

Thomas's commentary on Job is dated 1261-64 (see, Weisheipl, *Friar Thomas d'Aquino*, 368). In his much later commentary on the Psalms, composed (according to Weisheipl, *ibid.*) in 1272-73, there is another Aristotelian discussion of earthquakes (see *Super Psalmos* 17.6 [ed. Parma, 197]) which also apparently relies on Albert (see Albert, *Meteora* 3.2.6, 3.2.15, 3.2.9, 3.2.12 [ed. Borgnet, 4:620-21, 632, 625, 629]; other sections in Thomas's discussion of Psalm 17 also seem to depend on Albert's *Meteora*).

<sup>42</sup> See Dondaine and Bataillon, “Le commentaire,” 81 and 99.

<sup>43</sup> Mahieu le Vilain, *Les Metheores d'Aristote: Traduction du XIII<sup>e</sup> siècle publiée pour la première fois*, ed. Rolf Edgren (Uppsala, 1945).

<sup>44</sup> Compare, for example, *Super Meteora* 2.13, lines 23-28 below, with Mahieu, *Metheores* 2.7, p. 112.6-10: “Et en parla Anaxagoras ainsi et dit que ‘desous’ et ‘desus’ estoit el monde selonc nous percie et nos pies. Car il dit que tout ce qui est sous [terre] aval est desous, et que tout qui est desus la terre en amont est desus. Et si dist que le ciel estoit feu”; and *Super Meteora* 2.14, lines 126-33 with Mahieu, *Metheores* 2.8, p. 117.21-33: “Or semble, sire conte, que ceste parole soit contraire a ce que il avoit dit devant. Car il avoit dit devant que les terres motes qui aviennent de jour sont greignieurs et plus [fors] a l'eure de midi pour la chaleur du soleil, qui adonc degaste les bues qu'[] ne puissent venter en l'air. Car il dit ci que terre mote n'est pas fait volentiers en esté pour la chaleur du soleil, qui la terre deseiche trop. Mes ce n'est pas contrariété. Car, ja soit il voir que la chaleur du soleil, a l'eure de midi, en autre temps que en esté, degaste les bues qui sont sus terre, non pour quant, elle n'est pas si grande que elle puist degaster les bues dedens terre, anchois les fait lever et ne les peut pas degaster. Mais la chaleur du soleil est si grant en esté que elle degaste les bues dedens la terre et dehors en grant quantité. Par quoi sa parole n'a point de contrariété.” Although not noted in Edgren's edition of the *Metheores*, the influence of Thomas's commentary seems to be present throughout Mahieu's translation-paraphrase of *Meteora* 1.1-2.5 and 2.7-8.

modern editor of Mahieu's *Metheores*, notes, there is some dispute concerning the date of this work due to an ambiguity in the dedication. Edgren himself seems to conclude, though without great certainty, that it should be dated between 1260 (or more precisely, the date of Moerbeke's translation of the *Meteora* on which Mahieu's work is based) and 1270,<sup>45</sup> a conclusion which, if accepted, would make 1270 a *terminus ante quem* for Thomas's commentary. However, since the arguments for the dating of Mahieu's work are tenuous, and those concerning Thomas's commentary no less so, no firm conclusion can be drawn about the chronology of either, except that Thomas's work must have been composed first.

#### PRINCIPLES OF THE EDITION

In presenting the texts of Thomas and Aristotle and the apparatus for these texts, I have endeavoured to follow the principles of presentation and orthography established by the Leonine editions of Thomas's commentaries on the *Ethics*, *Politics*, *De anima*, and *De sensu et sensato*.

The *apparatus criticus* for the text of Thomas is intended to provide the reader with selected representative variants demonstrating both the distinction between *PV* and the "university" group and, within the latter, the existence of the subgroup *MO* representing an early stage of the university text. Some of my choices among variants are open to dispute: for greater control of the text, the reader should refer to the *apparatus criticus* and to the stemma presented above (p. 63).

Since the witness of *V*<sup>2</sup> is merely occasional, only its positive contributions to the establishing of the text are noted; consequently, references in the apparatus to *codd.* or *cett.* will *not* include *V*<sup>2</sup>.

<sup>45</sup> See Mahieu, *Metheores*, pp. viii-xvi.

## CAPITULUM XIII

De agitatione autem et motu terre post hec dicendum: <sup>15</sup>causa autem passionis 365a14  
habita huic generi est.

Sunt autem / tradita usque ad presens tempus tria et a / tribus: Anaxagoras 365a15  
enim Clazomenius, et prius / Anaximenes Milesius annunciauerunt, et hiis posterius  
Democritus / Abderites.

Anaxagoras quidem igitur ait etherem <sup>20</sup>natum ferri sursum, incidentem autem 365a19  
in inferiora / terre concaua mouere ipsam: que quidem enim sursum conseruntur  
/ propter ymbres, quoniam natura omnem similiter esse / somfam, tanquam  
existente hoc quidem sursum, hoc autem deorsum tocius spere, / et sursum quidem  
hac existente parte in qua habitamus, <sup>25</sup>deorsum autem altera.

Ad hanc quidem autem causam / nichil forte oportet dicere, tanquam ualde 365a25  
simpliciter dictam: sursum / enim et deorsum putare sic habere ut non ad terram  
quidem / undique ferantur grauitatem habencia corporum, sursum autem / leuia  
et ignis, stultum.

Et hoc uidentes orizontem <sup>30</sup>habitata quantam nos scimus alterum semper 365a29  
factum / translatis, tanquam existente gibbosa et sperica.

Et dicere / quidem quod propter magnitudinem in aere manet, agitari autem 365a31  
/ dicere percussam desubtus sursum per totam.

Adhuc autem / nullum reddunt accidencium circa terremotus: neque <sup>35</sup>enim 365a33  
regiones neque tempora quecunque participant hac passione.

Democritus autem ait terram plenam aqua existentem et suscipientem / multam 365b1  
aliam pluuialem aquam ab hac moueri: ampliori / enim facta, quia non possunt  
suscipere uentres / uim inferentem, facere terremotum, et exsiccata <sup>5</sup>trahentem  
in uacua loca ex repletioribus transeuntem / incidentem mouere.

Anaximenes autem ait plutam / terram et exsiccata rumpi, et ab hiis / ruptis 365b6  
frustis incidentibus concuti; propter quod et / fieri terremotus in siccitatibus et  
iterum in <sup>10</sup>pluuiosis: in siccitatibus enim, sicut dictum est, / exsiccata rumpi et  
ab aquis superhumectata / decidere.

Oportebat autem hoc accidente subuersam / multipliciter apparere terram. 365b12

Adhuc autem propter quam causam / circa quedam loca sepe fit hec passio 365b13  
nullo <sup>15</sup>differencia excessu tali ad alia? Et quidem / oportebat.

Omnino autem sic existimantibus necessarium dicere minus / semper terremotus 365b16  
fieri et tandem cessare / aliquando concussam: sic enim decidens talem habet  
naturam; / quare si hoc impossibile, palam quod impossibile et hanc esse <sup>20</sup>causam.

365a14 agitatione] scissura *T*<sup>1</sup> 15 autem] enim *T*<sup>1</sup> 18 annunciauerunt] enun-  
ciauerunt *T*<sup>1</sup> 21 conseruntur] et conserta esse *T*<sup>1</sup> 22 quoniam] quantum *T*<sup>1</sup>  
23 autem *T*<sup>1</sup>*N*<sup>1</sup>: quidem *P*<sup>1</sup>*MV*<sup>1</sup> 30 habitata *T*<sup>1</sup>*V*<sup>2</sup>: habitatiuam *P*<sup>1</sup>*MN*<sup>1</sup> nos  
scimus *N*<sup>1</sup>*MV*<sup>2</sup>: noscimus *T*<sup>1</sup>*P*<sup>1</sup> 33 sursum *T*<sup>1</sup>*V*<sup>2</sup>: desursum *P*<sup>1</sup>*MN*<sup>1</sup> b5 transeun-  
tem *M*: transcidentem *P*<sup>1</sup>*N*<sup>1</sup>*V*<sup>2</sup> 8 frustis] fristris *N*<sup>1</sup> 14 quedam loca] quedam  
*add. T*<sup>1</sup> fit *om. T*<sup>1</sup>

- 365a14 *De agitatione autem et motu terre* etc. Postquam Philosophus determinauit de uentis in aere flantibus, hic determinat de effectibus uentorum. Et primo de terremotu, qui causatur ex uento infra terram generato; secundo de tonitruo, qui causatur ex uento in nubibus, ibi: *De coruscatione autem et tonitruo* etc. 5
- Circa primum duo facit. Primo dicit de quo est intentio. Et dicit quod *post uentos dicendum est de motu et agitatione terre*. Et rationem ordinis assignat quia *causa* huius *passionis*, scilicet terremotus, *est habita*, id est consequens et proxima, *huic generi*, scilicet uentorum: quod enim uentum causat in aere, hoc causat infra terram terre agitationem. 10
- 365a15 Secundo cum dicit, *Sunt autem tradita* <etc.>, exequitur propositum. Et primo secundum opinionem aliorum; secundo secundum ueritatem, ibi: *Set quoniam manifestum* <etc.>
- Circa primum duo facit. Primo enumerat opiniones et opinantes. Et dicit quod *usque ad tempus* suum tres opiniones fuerant de terremotu trium 15 philosophorum, quorum unus fuit *Anaxagoras*, alius fuit *Anaximenes* predecessor eius, qui et magister ipsius fuisse dicitur, tertius autem post eos fuit *Democritus*; et nominat eos a locis unde fuerunt.
- 365a19 Secundo ibi: *Anaxagoras quidem igitur* etc., prosequitur opiniones. Et primo opinionem Anaxagore; secundo opinionem Democriti, ibi: *Democritus* 20 *autem ait* etc.; tercio opinionem Anaximenis, ibi: *Anaximenes autem ait* etc.
- Circa primum duo facit. Primo ponit opinionem. Circa quam sciendum est quod Anaxagoras estimauit quod sursum et deorsum distinguerentur in uniuerso secundum positionem hominis, ut scilicet quicquid est in uniuerso 25 supra caput nostrum sit sursum, quicquid autem est uersus pedes nostros totum sit deorsum; et secundum hoc sequitur quod sicut terra est inferior ad unam partem celestis spere, ita sit superior respectu partis opposite.

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3 terram] terras *MO B* generato] 9cūatō *M*: 9ccco *O* 4 qui] quod *MO*: quid *V*  
 9 huic generi (cf. *Arist.*, 365a15) cum *V* (gn<sup>r</sup>i man. corr.), *O* (h<sup>c</sup> gni), et *Arist. nova transl.*:  
 huic *P*: huius generis *M*: hui gnoni *B*: huic scilicet g<sup>a</sup>ni *S* 13 manifestum] maximum  
*MO* 15 fuerant *PV*: fuerunt *MO S*: fiunt ante opiniones *B* terremotu] motu  
 terre *MO S* 17 ipsius] suus *P*: eius *O S* 18 fuit *V*: om. cett. 23 quam  
*PV B*: quod *MO S*

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7-8 Et . . . assignat: cf. Alexander (ed. Smet, 180.9-10): "Dicit autem et causam, propter quam post sermonem de ventis dicit de terraemotibus."

9-10 quod . . . agitationem: cf. Alexander (ed. Smet, 180.12-14): "eadem enim exhalatio, ut procedens ostendet, ventorum et terraemotuum est causa."

17 qui . . . dicitur: cf. Thomas, *In libros Metaphysicorum* 1.4 n.90 (ed. Cathala-Spiazzi): "Hic ponit opinionem *Anaxagorae*, qui fuit alter discipulus *Anaximenis*."

Quia igitur ether, quem dicebat Anaxagoras ignem ex quo ponebat totum  
 30 celum consistere, naturaliter fertur *sursum*, terra autem est sursum respectu  
 alicuius partis celi, sequitur quod ether naturaliter feratur uersus terram.  
 Et ita dicebat quod incidit *in* concauitates que sunt in inferiori parte *terre*,  
 et sic ether inclusus in terram mouet *ipsam*; dicebat enim quod naturaliter  
 tota terra est sompha, id est concaua et spongiosa, set ista concauitas non  
 35 apparet ita in superiori parte terre, quoniam partes terre superiores  
 concluduntur et non sunt concaue *propter ymbres* humefacientes terram:  
 manifestum est enim quod propter siccitates fiunt yatus et concauitates in  
 terra, unde propter ymbres huiusmodi concauitates impediuntur. Et hoc idem  
 dicebat Anaxagoras ac si una pars *tocius spere* mundialis sit inferior, que  
 40 est uersus pedes nostros, et alia superior, scilicet *in qua* nos *habitamus*.

Secundo ibi: *Ad hanc quidem autem causam* <etc.>, inprobat hanc 365a25  
 opinionem quatuor rationibus. Circa quarum primam dicit quod cum ista  
 causa sit *simpliciter* et irrationabiliter assignata, non esset multum oportuno  
 aliquid contra eam *dicere* eo quod manifeste continet inconueniens: *stultum*  
 45 *enim* est *putare* quod sursum et deorsum determinantur *sic* in uniuerso quod  
*non* dicatur esse deorsum respectu *tocius* uniuersi locus terre, *ad* quem  
 feruntur grauia, et *sursum* locus oppositus, ad quem feruntur *leuia*, cuius  
 contrarium ipse ponit.

Secundam rationem ponit ibi: *Et hoc uidentes* etc. Ad cuius intelligenciam 365a29  
 50 considerandum est quod cum Anaxagoras poneret ignem naturaliter ferri  
 ad terram ex alia parte spere uelud sursum cogeatur, eadem ratione ponere  
 quod tota terra naturaliter tenderet uersus celum quasi deorsum; set dicebat  
 hoc impediri propter latitudinem terre, unde non ponebat terram esse sperice  
 figure, set late, ut quasi nataret in aere ad modum quo corpora lata natant  
 55 in aqua, rotunda uero submerguntur.

Hoc autem dicere stultum est, cum uideamus in tota terra quam *nos*  
*scimus habitata* quod transeuntibus de loco ad locum *semper* orizon

29 ignem] igne B: om. MO 30 est sursum PV: est deorsum B: sit deorsum O:  
 om. M: est S 31 celi, sequitur] consequitur O: om. M feratur PV: fertur cett.  
 33 in PV: om. cett. 34 et om. MO 35 ita PV: om. cett. 36 et non P:  
 ut non MO V: eorum B: non S 37 manifestum PV S: quantum MO B siccitates  
 P (corr. ex cicitates): siccitatem O B V S: scientem (?) M 38 impediuntur V:  
 ipse diuiduntur B P: ipse clñtur M: ipse canitur O: ipse dicuntur S 39 ac om. MO  
 mundialis PV B: mundi MO: meridionalis S 42 quarum primam MO B: primam  
 quarum inv. V S: quarum prima (est add., exp.) P 43 sit PV: om. MO S: exp. B  
 44 contra] qua MO 49 Secundam ... ponit V: om. cett. (homoeotel.) hoc] hec  
 PV 57 transeuntibus PV: transeuntes cett.

29-30 quem ... consistere: cf. Aristoteles, *De celo* 1.3 (270b24-25), 3.3 (302b4-5).

53-55 unde ... submerguntur: cf. Aristoteles, *De celo* 2.13 (294b13-23).

uariatur, quia semper polus articus uel magis uel minus eleuatur super  
orizontem, et hoc non esset si terra esset late figure uel concaue, set per  
hoc ostenditur quod est sperice figure et gibbose ex parte nostra.

60

365a31 Terciam rationem ponit ibi: *Et dicere quidem* <etc.> Et dicit quod etiam  
stultum est *dicere quod* terra quiescat *in aere propter* suam *magnitudinem*,  
et quod tamen ab ethere agitetur totaliter uersus *sursum* quasi *desubtus*  
percutta: hec enim uidentur esse contraria, quod quiescat et moueatur.

365a33 Quartam rationem ponit ibi: *Adhuc autem nullum reddunt* <etc.> Et 65  
dicit quod per hanc causam quam assignant de terremotu non potest  
assignari ratio eorum que accidunt *circa terremotus*: non *enim* omnes  
*regiones* nec omnia *tempora participant hac passione*, quod oporteret si  
terremotus accideret ex causa predicta.

365b1 Deinde cum dicit: *Democritus autem ait* <etc.>, ponit opinionem 70  
Democriti. Et dicit eum dixisse quod terra intrinsecus erat plena *aqua*, et  
tamen ab extrinseco superuenit ei multa alia aqua pluuialis a qua mouetur:  
dum *enim* aqua crescit, uoragines que sunt sub terra, quas *uentres* uocat,  
*non possunt* faciliter *suscipere* aquam superuenientem cum quadam uiolencia,  
et ex hoc accidit terremotus; et simul etiam aqua superueniens trahit partes 75  
terre que propter siccitatem inueniuntur aperte; et sic dum tam aqua quam  
terra superueniens *ex* plenis locis tendit *in uacua*, facit agitationem terre.

Hanc autem opinionem specialiter non reprobat, tum quia eius reprobatio  
apparet ex hiis que supra dicta sunt de fluminum generatione et fontium,  
tum etiam quia quantum ad aliquid conuenit cum sequenti opinione.

80

365b6 Deinde cum dicit: *Anaximenes autem* <etc.>, ponit opinionem Anaxi-  
menis. Et circa hoc duo facit. Primo narrat eam. Et dicit eum dixisse quod  
terra postquam fuerit compluta desiccatur et rumpitur ita quod apparent  
quedam aperture, *et ab hiis* aperturis cadunt quedam frusta inferius a quibus  
terra concutitur. Et huius signum accipiebat ex hoc quod terremotus fiunt 85

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60 ostenditur] ostendet *M*: ostendere *O* figure *P*: om. *cett.* 66 assignant *PV*:  
assignat *cett.* 68 hac passione *B V*: hanc passionem *cett.* oporteret] oportet *MO*  
72 ei *PV S*: om. *cett.* 73 crescit] et *add. MO V S* sub] super *MO* 74 cum]  
nisi *praem. MO* 75 simul *P S*: similiter *MO V*: similis *B* 76 dum tam *PV*: dicatur  
*M*: de tota *O*: cum tam *B*: dicitur tam *S* 80 cum sequenti *V S*: sequenti *MO*:  
consequenti *B*: cum sequente *P* opinione *PV*: operi *M*: operatione *O B S* 84 ab  
*V*: de *cett.* aperturis] apperturis *P*: ruptis *M*: rupturis *O B V S* frusta] frustra  
*codd.* 85 accipiebat *PV*: accipitur *M*: est accipi *O*: accipiat *B S*

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58-59 quia . . . orizontem: cf. Aristoteles, *De celo* 2.14 (297b30-298a6).

64 hec . . . moueatur: cf. Alexander (ed. Smet, 182.48-49): "Qui enim dicit sic moveri  
ipsam non servat quod ipsa quiescat in aere."

79 ex . . . fontium: cf. Aristoteles, *Meteora* 1.13 (349b2-351a18).

tam *in* temporibus siccis quam *pluuiosis*: *in* siccis quidem quia terra per exsiccationem rumpitur, in pluuiosis autem quia aque humectantes terram faciunt terram decidere inferius; et quantum ad hoc concordabat etiam Democritus.

90 Secundo ibi: *Oportebat autem* etc., inprobat predictam opinionem tripliciter. Primo quidem quia si ex hac causa accideret terremotus, oporteret quod in multis locis apparet terre subuersio propter partes terre que iam ceciderunt inferius in precedentibus terremotibus. 365b12

Secundo ibi: *Adhuc autem* etc., inprobat per hoc quod in quibusdam 365b13  
95 locis *sepe fit* terremotus in quibus tamen non apparet excessus talis rupture per differentiam *ad alia* loca, quod tamen oporteret si hoc quod dictum est esset causa terremotus, quia multiplicatio effectus ex multiplicatione cause procedit.

Tercio ibi: *Omnino autem* etc., inprobat per hoc quod oporteret *semper* 365b16  
100 *minus* et minus *fieri terremotus*, et tandem omnino *aliquando* cessaret, quia si partes superiores decidunt inferius, oportet quod quandoque repleant partes inferiores ut non sit ultra decidere; unde *si hoc est impossibile*, *impossibile* est hoc quod dictum est *esse causam* terremotus.

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95 fit] sit *MO*      100 quia] quod *MO B*      101 superiores] terre superiores *V*<sup>2</sup>:  
inferiores *cett.*      decidunt *V*: decident *V*<sup>2</sup>: incidunt *S*: scindunt *cett.*

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97-98 quia . . . procedit: cf. Thomas, *Sentencia libri De sensu et sensato* 2.3 (Leonine edition 45.2:116.270 *cum adnotationibus*).



## CAPITULUM XIV

- 365b21 Set quoniam manifestum quod necessarium et ab humido et / a sicco fieri ex-  
alationem, sicut diximus in / prioribus, necesse hiis existentibus fieri terremotus. /
- 365b24 Existit enim terra per se quidem sicca, propter ymbres autem <sup>25</sup>habens in se ipsam  
humiditatem multam, ut et a sole / et ab eo qui in ipsa igne calefacta, multus  
quidem extra, multus autem / intra fiat spiritus; et hic aliquando quidem continuus  
extra / fluit omnis, aliquando autem intra omnis, aliquando autem et partitur.
- 365b28 Si itaque / hoc impossibile aliter habere, quod post hoc considerandum utique  
erit <sup>30</sup>quale maxime motuum erit corporum: necesse enim quod / ad plurimum  
natum ire et uehementissimum maxime / tale esse. Vehementissimum quidem igitur  
ex necessitate quod citissime / fertur: percutit enim maxime propter uelocitatem;  
ad plurimum / autem natum est pertransire quod per omne ire maxime potest,  
<sup>35</sup>tale autem quod subtilissimum. Quare si quidem spiritus <sup>a1</sup>natura talis, maxime  
corporum spiritus motiuus. / Et enim ignis quando cum spiritu fuerit, fit / flamma  
et fertur celeriter.
- 366a3 Non igitur aqua neque terra causa utique / erit, set spiritus motus, cum intus  
fluxerit qui <sup>5</sup>extra exalatus.
- 366a5 Propter quod fiunt tranquillitate plurimi et / maximi terremotuum: continua enim  
existens exalatio / consequitur ut in pluribus impetum principii, quare aut intus  
/ simul aut extra fertur omnis.
- 366a8 Quosdam autem fieri et spiritu / existente nichil irrationabile: uidemus enim  
aliquando simul plures <sup>10</sup>flantes uentos quorum cum in terram feratur alter erit  
/ spiritu ente terremotus. Minores autem hii magnitudine fiunt / propter quod  
diuisum est principium et causa ipsorum. /
- 366a13 Nocte autem plures et maiores fiunt terremotuum, qui / autem de die circa  
meridiem: tranquillissimum enim est ut <sup>15</sup>in pluribus diei meridies. Sol enim cum  
/ maxime optineat, declinat exalationem in terram; / optinet autem maxime circa  
meridiem. Et noctes autem / diebus tranquilliores propter absenciam solis; quare  
/ intus fit iterum fluxus, sicut recursus, in contrarium <sup>20</sup>eius que extra diffusionis,  
et ad diluculum maxime: tunc / enim et spiritus nati sunt incipere flare. / Si igitur  
intus extiterit permutatum principium ipsorum sicut / Euripus, propter multitudinem  
fortiorem facit terremotum.

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365b21 quoniam] quantum *T*<sup>1</sup>      22 a *T*: om. *P*<sup>1</sup>*N*<sup>1</sup>*V*<sup>2</sup>      25 se ipsam] se ipsa *T*<sup>1</sup>  
27 fiat spiritus *T*<sup>1</sup>: spiritus fiat *inv.* *P*<sup>1</sup>*MN*<sup>1</sup>*V*<sup>2</sup>      30 motuum erit *P*<sup>1</sup>*N*<sup>1</sup>*V*<sup>2</sup>: erit motuum  
*T*<sup>1</sup>      366a4 qui] *ql*<sup>1</sup> *T*<sup>1</sup>      5 plurimi *T*<sup>1</sup>(*N*?): plura *P*<sup>1</sup>*MV*<sup>2</sup>      6 maximi *T*<sup>1</sup>: ma-  
xime *P*<sup>1</sup>*MN*<sup>1</sup>*V*<sup>2</sup>      enim *T*<sup>1</sup>: om. *P*<sup>1</sup>*N*<sup>1</sup>*V*<sup>2</sup>      12 propter quod] propterea quod *T*<sup>1</sup>  
14 est] et *T*<sup>1</sup>      19 sicut recursus *T*<sup>1</sup>: recursus *corr.* ex reculsus *M*: sic reculsus *P*<sup>1</sup>: sic  
reclusus *V*<sup>2</sup>: sicut reclusus *N*<sup>1</sup>      22 permutatum *T*<sup>1</sup>: est *add.* *P*<sup>1</sup>*MN*<sup>1</sup>*V*<sup>2</sup>

Adhuc / autem circa loca talia fortissimi fiunt terremotuum <sup>25</sup>ubi mare fluxile 366a23  
aut regio spongiosa et subantrosa; / propter quod et circa Elispontum et circa  
Achaïam et Siciliam, / et Euboie circa hec loca: uidetur enim penetrare / sub terra  
mare; propter quod et therme que circa / Edipsum a tali causa facte sunt. Circa  
dicta autem <sup>30</sup>loca terremotus fiunt maxime propter angustiam: / spiritus enim factus  
uehemens, et propter multitudinem maris / allati repellitur iterum in terram quod  
/ natum erat efflare ex terra. Regionesque quecunque inania <sup>b1</sup>habent que subtus  
loca, multum suscipientes spiritum concuciantur / magis.

Et uere autem et autumpno maxime, et in / pluuiosis et in siccitatibus fiunt 366b2  
propter eandem causam: / tempora enim hec maxime spumosa; estas enim et  
<sup>5</sup>hyemps, hoc quidem propter gelu, hoc autem propter estum facit / immobilitatem:  
hoc quidem enim ualde frigidum, hoc autem ualde siccum / est. Et in siccitatibus  
quidem spumoso aer: hoc / enim ipsum est achimos quando amplior exalatio  
/ sicca facta fuerit quam humida; in pluuiosis autem amplio<sup>10</sup>rem facit eam que  
intus exalationem, et eo quod intercipiatur / in angustioribus locis et compellatur  
in minorem locum / talis segregatio, repletis concauitatibus aqua, / cum inceperit  
optinere, eo quod multa in paruum locum comprimatur, / fortiter mouet fluens  
uentus et offendens.

Oportet enim <sup>15</sup>intelligere quod sicut in corpore nostro et tremorum et pulsum 366b14  
/ causa est spiritus intercepti uirtus, / sic et in terra spiritum simile facere, et /  
hunc quidem terremotuum uelut tremorem esse, hunc autem uelut pulsum, / et  
sicut accidit sepe post urinationem: <sup>20</sup>per corpus enim fit uelut tremor quidam contra  
translato / spiritu de foris intus subito; talia enim fieri / et circa terram. Quantam  
autem habeat spiritus uirtutem, non solum / ex hiis que in aere fiunt oportet  
speculari (hic quidem / enim propter magnitudinem existimabit utique aliquis talia  
posse <sup>25</sup>facere), set et in corporibus animalium: tetani / enim et spasmi spiritus  
quidem sunt motus, tantum / autem uigorem habent ut multi simul temptantes  
ui tenere / non possint optinere motum infirmantium. / Tale itaque oportet  
intelligere factum et in terra, ut comparetur ad <sup>30</sup>paruum maius.

Signa autem horum et ad nostrum sensum / sepe facta sunt: iam enim terremotus 366b30  
in quibusdam locis / factus non prius desiit antequam erumpens in eum qui super  
terram / locum manifeste ut ecnefias exiuit qui mouit uentus, <sup>a1</sup>quale et circa  
Eracleam eam que in Ponto nuper factum fuit, / et prius circa sacram insulam:  
hec enim est una / uocatarum Eoli insularum. In hac enim intumuit aliquid terre,  
/ et ascendit uelut collis moles cum sono; tandem autem rupta <sup>5</sup>exiuit spiritus multus,  
et fauillam et cinerem / eleuauit, et Lipareorum ciuitatem existentem non longe

366a25 fluxile T: fluxibile P<sup>1</sup>MN<sup>1</sup>V<sup>2</sup> 28 therme T<sup>1</sup>: ch'me P<sup>1</sup>: th'me N<sup>1</sup>: creme M:  
st<sup>1</sup>me V<sup>2</sup> que] qui T<sup>1</sup> 30 fiunt] et add. T<sup>1</sup> 33 quecunque T<sup>1</sup>MV<sup>2</sup>: quicunque  
P<sup>1</sup>N<sup>1</sup> b4 enim<sup>1</sup> T<sup>1</sup>: autem P<sup>1</sup>MN<sup>1</sup>V<sup>2</sup> 5 facit T<sup>1</sup>: fci P<sup>1</sup>MN<sup>1</sup>V<sup>2</sup> 8 enim ipsum  
T<sup>1</sup>: ipsum enim P<sup>1</sup>N<sup>1</sup>V<sup>2</sup> achimos V<sup>2</sup>: achinos P<sup>1</sup>N<sup>1</sup>: achmos M: auchmos T<sup>1</sup> 10 et  
eo] ex eo T<sup>1</sup> 17 simile T<sup>1</sup>: similem P<sup>1</sup>MN<sup>1</sup>V<sup>2</sup> 20 9<sup>a</sup> translato T<sup>1</sup>: coicans lato  
P<sup>1</sup>V<sup>2</sup>: cutans lato MN<sup>1</sup> (contra translato? corr. N<sup>1</sup>): translato M 24 enim T<sup>1</sup>: om.  
P<sup>1</sup>MV<sup>2</sup> talia posse T<sup>1</sup>: posse talia P<sup>1</sup>MV<sup>2</sup> 25 et T<sup>1</sup>: om. P<sup>1</sup>V<sup>2</sup> 26 enim  
P<sup>1</sup>V<sup>2</sup>: om. T<sup>1</sup> 33 ecnefias T<sup>1</sup>: emefias P<sup>1</sup>M: enefias V<sup>2</sup> 367a2 circa T<sup>1</sup>: om. P<sup>1</sup>MV<sup>2</sup>  
3 uocatarum] uocatorum T<sup>1</sup> 5 spiritus multus T<sup>1</sup>: multus spiritus inv. P<sup>1</sup>V<sup>2</sup>

/ omnem incineravit, et ad quasdam in Ytalia ciuitatum / uenit. Et nunc ubi  
exsufflatio hec facta fuit palam / est: et enim facti ignis in terra hanc putandum  
<sup>10</sup>esse causam, cum decusum accendatur primo in / parua discerpto aere.

367a11 Argumentum autem est quod fluant / sub terra spiritus et quod fit circa has  
/ insulas: cum enim uentus debeat flare auster, presignificat / prius: sonant enim  
loca ex quibus fiunt <sup>15</sup>exsufflationes, propterea quod mare propellatur iam / de  
longe, ab hoc autem quod ex terra exsufflans repellatur / iterum intus, quam quidem  
supergreditur mare hac. Facit / autem sonum sine seismo propter amplitudinem  
locorum / (effunditur enim in inmensum extra) et propter paucitatem <sup>20</sup>repulsi aeris.

367a20 Adhuc fieri solem caliginosum et / obscuriorem sine nube, et ante matutinos  
terremotus aliquando / tranquillitatem et frigus forte, signum dicte cause / est.  
Solem enim caliginosum et obscurum necessarium / esse incipiente spiritu progredi  
in terram dissolvente <sup>25</sup>aerem et disgregante, et ad auroram et / matutinos  
tranquillitatemque et frigus: tranquillitatem quidem enim / necessarium ut in  
plurimum accidere, quemadmodum dictum est / et prius, uelut regressu intro facto  
spiritus, / et magis ante maiores terremotus: non discerptum <sup>30</sup>enim hoc quidem  
extra, hoc autem intus, set simul totum latum / necessarium ualere magis. Frigus  
autem accidit / propterea quod exalatio intro uertitur, natura calida / existens  
secundum se. Non uidentur autem uenti esse calidi quia / mouent aerem existentem  
plenum multo et frigido uapore, <sup>b1</sup>sicut spiritus per os exsufflatus: et enim / hic  
de prope quidem est calidus, sicut et cum hyamus, / set propter paucitatem non  
similiter manifestum, de longe autem frigidus / propter causam eandem uentis.  
Deficiente autem in <sup>5</sup>terra tali uirtute, conueniens propter humiditatem / uaporosus  
defluxus facit frigus, in quibus accidit locis / fieri hanc passionem.

367b7 Idem autem causa et signi / consueti aliquando fieri ante terremotus: aut enim  
per / diem aut parum post occasum serenitate existente, nubecula subtilis <sup>10</sup>apparet  
porrecta et longa uelut lineae longitudo / quamplurimum recta, spiritu deficiente  
propter / translationem. Simile autem accidit et in mari / circa litora: quando  
quidem enim fluctuans incidet, uehementer / grosse et distorte fiunt regmines;  
quando autem <sup>15</sup>placor fuerit, propterea quod parua fit segregatio, subtiles sunt  
/ et recte. Quod quidem igitur mare facit circa terram, hoc / spiritus circa eam  
que in aere caliginem, ut quando fuerit facta / tranquillitas, omnis recta et subtilis  
derelinquatur, tanquam / nubecula sit regmis aeris.

367b19 Propter eandem causam autem et circa <sup>20</sup>eclipses aliquando lune accidit fieri  
terremotum: / quando enim iam prope fuerit interpositio, et nondum / quidem  
sit omnino deficiens lumen et quod a sole / calidum ex aere, iam autem marcefactum,

367a10 decusum *T*<sup>1</sup>: densum *P*<sup>1</sup>*MV*<sup>2</sup> 11 parua discerpto *T*<sup>1</sup>: paruo discerpto *P*<sup>1</sup>*M*:  
paruo discreto *V*<sup>2</sup> 14 loca *T*<sup>1</sup>: *om. P*<sup>1</sup>*MV*<sup>2</sup> 16 ab] ad *T*<sup>1</sup> 27 necessarium]  
est *praem. P*<sup>1</sup>*MV*<sup>2</sup> 28 et *om. T*<sup>1</sup> 29 discerptum *T*<sup>1</sup>: discreptum *P*<sup>1</sup>: disceptum  
*V*<sup>2</sup>: discretum *M* b13 litora] litora *T*<sup>1</sup> incidet] incident *T*<sup>1</sup> 14 regmines  
*T*<sup>1</sup>: regimines *P*<sup>1</sup>*MV*<sup>2</sup> 15 placor fuerit] fuerit placor *inv. T*<sup>1</sup> fit] sit *T*<sup>1</sup> 19 sit  
regmis *T*<sup>1</sup>: fit regmis *P*<sup>1</sup>: fit reginis *V*<sup>2</sup>: fit reginis *M* propter eandem causam] propter  
quod *T*<sup>1</sup> 21 enim] autem *T*<sup>1</sup>

tranquillitas fit, / contra translato spiritu in terram, qui facit <sup>25</sup>terremotum ante eclipses: fiunt enim et uenti ante / eclipses sepe, in principio quidem noctis ante eclipses / medie noctis, in media autem nocte ante diluculares. Accidit / autem hoc propter marcescere calidum quod a luna, / cum prope quidem fuerit facta latio in quo factis erit <sup>30</sup>eclipsis: remisso igitur quo detinebatur aer et quiescebat, iterum / mouetur et fit spiritus, tardioris eclipsis / tardior.

*Set quoniam manifestum* etc. Postquam Philosophus reprobauit opiniones 365b21 aliorum de terremoto, hic determinat de eo secundum suam opinionem.

Et primo assignat causam terremotus; secundo causam quorundam accidencium circa ipsum, ibi: *Cum autem fortis factus fuerit* etc.

- 5 Circa primum duo facit: primo assignat causam terremotus; secundo ostendit causam esse bene assignatam, ibi: *Existit enim terra* <etc.>

Dicit ergo primo quod dictum est in precedentibus duplicem esse *exalationem*: unam uaporosam que resoluitur *ab humido*, alteram fumosam que resoluitur *a sicco*, et ex hac causatur terremotus.

- 10 Secundo ibi: *Existit enim terra* etc., probat causam bene esse assignatam. 365b24 Et primo per rationem; secundo per signa, ibi: *Propter quod fiunt* etc.

Vtitur autem tali ratione: exalatio sicca uentum causat, unde cum infra terram retinetur causat uentum infra terram; uentus autem maxime est motuius corporum; a uento igitur rationabile est fieri terremotum.

- 15 Circa hanc rationem tria facit. Primo manifestat quod exalatio sicca causet uentum infra terram. Et dicit quod licet *terra per se sit sicca*, tamen *propter ymbres* quos recipit *multam humiditatem* habet, *ut* sic tum ex calore solis, tum ex calore incluso *in* terra qui est a sole et stellis, causatur multa fumositas exalata ex terra ex qua multum de uento causatur. *Et aliquando* tota materia 20 uenti a terra eleuatur et causatur uentus in aere; *aliquando autem* tota materia retinetur intus infra terram et causat infra terram uentum; *aliquando autem* partim retinetur infra terram et partim eleuatur supra, et sic utrobique uentus causatur.

- Secundo ibi: *Si itaque hoc* etc., ostendit quod uentus maxime habet 365b28 25 uirtutem ad mouendum corpora. Et dicit quod cum predictae *impossibile* sit

367b24 contra translato] 9translato T<sup>1</sup>

7 duplicem VS: dupliciter cett. 9 a PV: ex cett. 10 bene esse V: esse bene inv. P: bene BS: om. MO 11 signa PV: signum cett. 13 maxime V: rationabile B: om. cett. 14 motuius PV: motus cett. igitur rationabile est V: autem (ergo O) est rationabile cett. 16 licet terra P: terra licet inv. cett. 18 qui PV: quod MO B: om. S est P: etiam (et praem. M) cett. 18-19 multa ... causatur om. MO (homoeotel.) 19 tota materia PV: circa M: corpora quando O: tonitruo magis B: de tota quando S 20 uenti a terra V: terram M: terra OS: om. B: terre P 25 mouendum PV: quasi add. MO BS corpora] corpus MOS

*aliter se habere*, oportet considerare quid sit *maxime motuum corporum*. Ad quod duo requiruntur, quorum unum est *quod* possit *ad* multam distanciam moueri: cum enim corporalia mouencia non moueant nisi moueantur, oportet quod maxime motuum est ad multum moueri; secundo oportet quod sit uehemens et uiolentum ad hoc quod fortiter impellat. Set 30 quod aliquid sit *uehementissimum* ad uiolenter impellendum conuenit ex uelocitate motus, quia quod uelociter fertur fortiter *percutit*; set quod aliquid *ad* magnam distanciam possit transire conuenit ex subtilitate ratione cuius *potest per* omnia penetrare. Hec autem duo conueniunt uento, scilicet uelocitas motus et subtilitas, unde sequitur quod uentus *maxime* possit 35 mouere corpora. Et hoc non solum per rationem, set etiam ad sensum apparet, quia *quando* igni adhibetur uentus, *fit* inflammatio et uelociter fertur.

366a3 Tercio ibi: *Non igitur aqua* <etc.>, inducit conclusionem principaliter intentam, scilicet quod *causa* terremotus non est neque *aqua*, ut dixit 40 Democritus, *neque terra*, ut dixit Anaximenes, *set* uentus, quando scilicet fluxus exalationis infra terram retinetur.

366a5 Deinde cum dicit: *Propter quod fiunt* etc., manifestat causam assignatam per signa. Et primo per signa accepta ab ipsis uentis; secundo per signa accepta ab inferioribus rebus, ibi: *Adhuc autem circa loca* <etc.>; tercio 45 <per signa accepta> a rebus in alto existentibus, ibi: *Adhuc solem fieri caliginosum* <etc.>

Circa primum tria facit. Primo ponit signum a uentis sumptum generaliter. Et dicit quod quia terremotus fit a uento infra terram retento, *plurimi et maximi terremotuum fiunt* quando aer est tranquillus a uentis, quia cum 50 tota *exalatio* que resoluitur a terra et est materia uenti sit quasi aliquid unum continuum, *ut in pluribus* sequitur *impetum principii*; unde si id quod primo exalat feratur infra terram, tota exalatio infra terram continebitur, et sic omnes uenti erunt infra terram causantes terremotum et extra erit tranquillitas; e conuerso autem erit si principium exalationis feratur *extra*. 55

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31 uiolenter *V*: aliquid *MBS*: alico *O*: uiolentum *P* impellendum *BV*: compellendum *M*: expellendum *OPS* 36 per rationem *V* s.v.: ratione *cett.* 37 igni *PV*: *om.* *M*: igitur *O*: igitat *B*: terre *S* fit] sit *MO* 49 uento *PV*: uentis *cett.* retento *V*: retentem *MO*: retinentis *B*: recepto *P*: receptam *S* 51 aliquid *V*: ad *cett.* 53 tota . . . terram *V*: *om. cett.* 54 terram *om. MO*

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28-29 cum . . . moueantur: cf. Aristoteles, *Physica* 8.4-5; J. A. Weisheipl, "The Principle *Omne quod movetur ab alio movetur* in Medieval Physics" in *Nature and Motion in the Middle Ages*, Studies in Philosophy and the History of Philosophy 11 (Washington, 1985), 75-97.

40-41 ut dixit Democritus . . . ut dixit Anaximenes: cf. Alexander (ed. Smet, 184.5-6): "ut DEMOCRITUS putabat . . . ut ANAXIMENES existimabat."

- Secundo ibi: *Quosdam autem fieri* <etc.>, excludit quandam obiectionem 366a8  
 que posset fieri ex hoc quod aliquando terremotus accidunt etiam uentis  
 in aere existentibus. Et dicit quod hoc non est *irrationabile: uidemus enim*  
 quod etiam in aere quandoque flant plures uenti *simul*, sicut ex superioribus  
 60 patet, unde *cum* causentur duo uenti *quorum* unus feratur *infra terram*  
*faciens* terremotum et alius sit in aere, sequetur quod *terremotus* sit simul  
 cum uento in aere. Set tamen necesse est quod huiusmodi terremotus sint  
*minores*, quia exalatio que est *causa et principium est* diuisa, partim fluens  
 extra et partim retenta intus.
- 65 Tercio ibi: *Nocte autem* <etc.>, prosequitur istud signum quod a uentis 366a13  
 assumpsit in quibusdam specialibus. Et dicit quod in *nocte fiunt plures et*  
*maiores* terremotus quam in die, set illi *qui fiunt de die* sunt maiores qui  
 sunt *circa meridiem*. Et assignat causam quare diurnorum terremotuuum sunt  
 maximi qui sunt circa meridiem, quia scilicet hec hora *diei ut in pluribus*  
 70 *est* maxime tranquilla a uentis, quia quando *sol maxime* habet uictoriam  
 super terram, facit *exalationem* causantem uentos declinare *infra terram*:  
 illud enim quod tunc eleuatur in altum propter uictoriam solis rarefactum  
 consumitur et dispergitur; set quia non habet tantam uictoriam *infra terram*,  
 resoluit quidem exalationem, set non consumit eam; et inde est quod quando  
 75 maxime sol obtinet super terram, maxime exalatio includitur *infra terram*.  
 Vnde cum *maxime* habeat uictoriam in hora meridiem, tunc maxime exalatio  
 declinat *infra terram* tranquillitate in aere existente, et ideo diurnorum  
 terremotuuum maximi fiunt in meridiem. Set in nocte fiunt adhuc magis, quia  
 in nocte fit tranquillitas in aere, quia exalationes causantes uentos non ita  
 80 eleuantur *propter absenciam solis* sicut in die, etsi aliquando contingant in  
 nocte uenti propter exalationes prius eleuatas; et ideo facta resolutione  
 exalationum in die apud presenciam solis, quia cessat causa eleuans in nocte,  
 recurrunt exalationes *in contrarium*, scilicet *infra terram*, et ideo terremotus  
 causantur in noctibus; *et maxime circa diluculum*, quia de nocte exalationes  
 85 *infra terram* retente quasi congelantur, set circa diluculum propter appropinquationem solis resoluuntur exalationes et excitantur uenti; unde *si principium* uentorum inueniatur sub terra, faciet *fortiorem terremotum*

57 accidunt PV: fiunt cett. 58 est om. MO 59 etiam om. MO simul  
 om. MO 66-67 Et ... terremotus om. MO 67 quam] scilicet MO 69 ut  
 V: om. cett. 72 illud PV: id MO: ideo B: om. S rarefactum PVV<sup>2</sup>: rarefactam  
 M: rarefacit OS: calefacit B 74 resoluit PVV<sup>2</sup>: resoluitur cett. quidem PVV<sup>2</sup>:  
 per M: in O: quod B: quoad S 75 infra PVV<sup>2</sup>: super MO B: supra S 76 habeat  
 P: om. S: habet cett. 78 magis PVS: magni MO: maximi B 84 et PVS: om.  
 cett. nocte PV: die cett. 86 excitantur PV S: excitant MO: exitant B

59-60 sicut ... patet: Aristoteles, *Meteora* 2.6 (364a27-32).

*propter multitudinem* materie recurrentis infra terram, *sicut* accidit de motu Eurippi, qui propter recursum aque fortiter mouetur.

366a23 Deinde cum dicit: *Adhuc autem circa loca* <etc.>, manifestat predictam 90 causam terremotus per signa a rebus inferioribus accepta. Et primo ponit signa generalia; secundo quedam signa specialia, ibi: *Signa autem horum* <etc.>

Circa primum tria facit: primo ponit signa accepta a locis; secundo signa accepta a temporibus, ibi: *Et uere autem et autumpno* <etc.>; tercio signa 95 accepta a nostris corporibus, ibi: *Oportet enim intelligere* <etc.>

Dicit ergo primo quod quia terremotus causantur ex uento infra terram retento, inde est quod *circa illa loca fiunt* maximi terremotus in quibus uel *mare* habet magnum fluxum uel terra est *spongiosa et* cauernosa. Et ponit exemplum de quibusdam locis, sicut est in Ellesponto *et* in Achaia 100 *et* in Sicilia, *et circa* quedam alia *loca* in quibus *uidetur mare penetrare sub terra* propter cauernositatem terre. Et ex ista *causa*, quia scilicet terra est subantrosa et mare fortiter impellit, dicit esse factas in quodam loco thermas, id est emanationes aquarum calidarum: nam propter impulsione que fit ex motu maris infra terram, excitatur calor et ignitio interius, et 105 maxime si sint loca cauernosa in quibus aer contineatur, et per huiusmodi adustionem redditur terra sulfurea. Dicit autem quod *circa loca* predicta que sunt uicina mari fluxili maximi *fiunt terremotus propter* angustationem interioris uenti ab impulsu maris ipsum exalare non permittentis, quia uentus *uehemens* qui natus erat exire a terra repellitur iterum in terram propter 110 *multitudinem maris* que impellitur a uento exteriori uersus terram. Assignat etiam causam quare in locis cauernosis fiunt terremotus. Et dicit quod *quecunque regiones habent* sub terra *loca* cauernosa que dicuntur *inania*, quia non sunt plena corpore solido, *magis concutuntur* per terremotus, quia in huiusmodi cauernis recipiunt *multum* de uento. 115

366b2 Deinde cum dicit: *Et uere autem et autumpno* <etc.>, ponit signa sumpta ex temporibus. Et dicit quod *maxime* fiunt terremotus in *uere et* in *autumpno*, *et fiunt* etiam in *siccitatibus et* in temporibus *pluuiosis propter*

89 aque *V: om. cett.* 92 signa<sup>2</sup> *V: om. cett.* 97 quia *V: om. cett.* 99 uel<sup>2</sup>  
*PVS: et MOB* et *V: uel cett.* 100 Ellesponto] elles ponto *V: melle sponto*  
*MOPS: moles pō B* 101 loca *V: om. cett.* penetrare *VS: penetratum MOB:*  
*penetrari P* 103 et *om. MO* factas] factus *MO* 104 thermas *V man. corr.:*  
*stremas MBS: foremas O: stemas P* 105 excitatur *V: exsiccatur MO: exiccatur*  
*BS: exitatur P* 106 aer *om. MO* 107 adustionem *V: ustionem MOB S:*  
*hustionem P* 108 que *PV: iam cett.* mari fluxili *PV: maris fluxisti MO:*  
*mare fluxisti B: mare fluxibili S* fiunt *PV: om. cett.* 110 erat] est *MO*  
 110-11 repellitur . . . exteriori *om. MO* 113 loca *om. MOB* 114 quia<sup>1</sup> *PV: que*  
*MO: quare BS* 117 terremotus *PV: om. cett.* 118 in<sup>2</sup> *PV: om. cett.*

*eandem causam*, scilicet quia terremotus ex uentis causantur, unde maxime  
 120 fiunt in uere et in autumpno: in hyeme enim *propter* frigiditatem et *gelu*  
 immobilitantur uenti quia frigiditas impedit resolutionem exalationum que  
 est materia uentorum; in estate uero *propter* inmensum *estum* et siccitatem,  
 ita quod non est materia in terra ex qua exalatio resoluatur (sicut ex lignis  
 ualde siccis resoluitur modicus fumus), quia tunc maxime obtinet sol super  
 125 terram.

\* \* \*

Posset autem obici de hoc quod supra dixit quod in meridie maximi  
 fiunt terremotus quia tunc maxime obtinet sol super terram, unde si in estate  
 maxime obtinet, uidetur quod tunc maxime debeant fieri terremotus.

Set non est simile, quia uictoria solis que est in meridie licet sufficiat  
 130 ad desiccandum superficiales humiditates terre ut non possint exalationes  
 congregari ad exalationem uenti, non tamen sufficit ad totalem desiccationem  
 terre qualis accidit in estate, per quam etiam nec interiores humiditates  
 supersunt ex quibus materia uentorum resolui possit.

\* \* \*

Assignat etiam causam quare *in* temporibus siccis fiunt terremotus, quia  
 135 tunc *aer* est uentosus: *hoc enim*, scilicet aer, *est achimos*, id est sine humore,  
*quando* plus fit de exalatione sicca *quam* de humida, que quidem exalatio  
 sicca est uentorum materia; set tamen intelligendum est: quando non est  
 tanta siccitas que humiditatem terre consumat ut exalatio impediatur, ut  
 accidit aliquando in estate. Set *in* temporibus *pluuiosis* fit terremotus propter  
 140 multitudinem exalationis que concluditur *in locis* artis sub terra *et* constrin-  
 gitur *in minorem locum* propter hoc quod concauitates terre temporibus  
 pluuiosis replete sunt *aqua*; et ideo *cum* exalatio multiplicata *inceperit* habere  
 uictoriam, *uentus* ex ea generatus propter constrictionem impingit ad partes  
 terre *et fortiter mouet*.

145 Deinde cum dicit: *Oportet enim intelligere* <etc.>, ponit signa que 366b14  
 accipiuntur ex corporibus nostris. Et dicit quod *sicut in corpore nostro*

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119-20 maxime ... gelu <i>om. MO</i>	120 in <sup>2</sup> <i>V: om. cett.</i>	122 uero <i>PV: om.</i>
<i>cett.</i> 128 tunc <i>PV: om. cett.</i>	129 licet] non <i>add. MO B P S</i>	132 terre <i>V:</i>
<i>om. cett.</i> etiam <i>PV S: om. MO B</i>	nec <i>V: om. cett.</i>	138 impediatur] impeditur
<i>MO</i> 142 cum] quando <i>P: enim V</i>	146 sicut <i>V: om. cett.</i>	

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123-24 sicut ... fumus: cf. Aristoteles, *Meteora* 2.4 (361a17-19): "ubi autem plurimam  
 aquam terra suscipit, hic plurimam necessarium fieri exhalationem, simili modo ut ex viridibus  
 lignis fumus"; Thomas, *Super Meteora* 2.7 n.10 (Leonine edition 3:411): "sicut ex lignis  
 viridibus et humidis maior exhalat fumus quam ex siccis."



tremor *et* pulsus accidit ex spiritu incluso qui non habet liberum exitum, similiter facit spiritus inclusus in terram; unde aliquis terremotus est sicut tremor et aliquis sicut pulsus. Et dicit quod *sicut post urinationem* frequenter accidit in corpore tremor eo quod subito uentus ab exteriori intrat interius 150 permeatus unde exit urina, sic accidit *et circa terram*, nam uentus interius inclusus facit terre tremorem. Quod autem uentus habeat magnam uirtutem ad mouendum apparet *non solum ex hiis que facit in aere*, ubi potest dici quod magna facit *propter* suam *magnitudinem*, *set* etiam ex hiis que facit in corporibus nostris modicus spiritus in nobis inclusus: manifestum est enim 155 quod *spasmi et tetani*, qui accidunt ex contractione neruorum, sunt propter motus spiritus qui retrahitur et retractus retrahit neruos; huiusmodi autem spasmi tam uiolentum motum *habent ut multi* congregati aliquando temptauerunt per uiolenciam retinere ne nerui contraherentur, et tamen non potuerunt uincere *motum infirmancium*. Et sic oportet intelligere, ut fiat 160 comparatio minoris ad maius, quod uentus inclusus in terra cum magna uiolencia terram mouet.

366b30 Deinde cum dicit: *Signa autem horum* <etc.>, ponit signa ex quibusdam particularibus accidentibus. Quorum primum est quod dicit quendam terremotum in aliquibus locis factum fuisse qui non desiit quousque 165 erumperet uentus qui mouebat terram manifeste extra terram ad modum quo uentus qui uocatur *enefias*, de quo infra dicitur, exit a nube. Et hoc dicit suo tempore accidisse in *Ponto circa Eracleam*, et prius dicit hoc accidisse in insula sacra, hoc est Vulcani, in qua intumuit quandoque terra et eleuata est cum sono quedam moles ad modum collis, que tandem propter 170 uiolenciam uenti interioris rupta fuit, et exiuit inde multus uentus eleuans *fauillam et cinerem*, propter quod repleta fuit ciuitas *Lipareorum* cinere, et cinis ille peruenit ad multas ciuitates Ytalie. Et dicit apparuisse illius facti uestigia usque ad tempus suum: causa enim est illius ignis qui in illa insula apparet, uel in aliqua alia terra, quod aer infra terram in paruas partes 175 diuiditur, et ex motu ignitur, et ex tali ignitione primo terra accenditur, et istius accensionis diu durat effectus.

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150-51 eo . . . permeatus om. MO      154 que facit PV: om. cett.      157 qui] quod MO  
 158 tam V: om. cett.      166 qui om. MO      167 enefias M: enefaias  
 O P: anofalas B: et nefias V: enestuosas S      168 dicit<sup>1</sup> PV: om. M: ostendit O B S  
 Eracleam] erat in eam MO      169 Vulcani] uel cani MO      intumuit V: interimit  
 MO: intumuit B P S      174 causa . . . illius V man. corr.: quia iste M: quia ille O: quia  
 illam B: quia illius P      175 uel] et MO      176 accenditur] accensior MO

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167 de . . . dicitur: Aristoteles, *Meteora* 2.9 (369a20), 3.1 (370b4-10).

Secundum autem signum particulare ponit ibi: *Argumentum autem est* 367a11  
 <etc.> Et dicit quod possumus accipere argumentum *quod uenti fluant sub*  
 180 *terra* illud quod accidit *circa has insulas*, scilicet Vulcanum et alias insulas  
 dictas Eoli, quia huiusmodi insule presignant quando *debeat auster flare*  
 quodam sono qui causatur ex *hoc quod* quando modicum incipit auster  
 flare a remotis et a mari, illud quod debebat extra terram exsufflare de  
 uento *iterum* repellitur *intus* propter *mare* quod superuenit, et sic fit sonus,  
 185 tamen quandoque *sine seismo*, id est terremotu, tum *propter* hoc quod loca  
 cauernosa infra terram sunt ampla ita quod uentus interius conclusus  
 dispergitur *in immensum*, tum etiam *propter paucitatem* que est exalationis  
 repulse, que quandoque pauca est et non sufficit facere terremotum.

Deinde cum dicit: *Adhuc solem fieri caliginosum* <etc.>, ponit signa 367a20  
 190 accepta a rebus que fiunt in alto. Et diuiditur in tres partes secundum tria  
 signa que ponit: secunda pars incipit ibi: *Idem autem causa* <etc.>; tertia  
 ibi: *Propter eandem autem* <etc.>

Dicit ergo primo quod oportet pro signo accipere *cause* assignate de  
 terremotu hoc quod circa terremotum fit sol caliginosus *et obscurus sine*  
 195 *nube* manifesta, *et* quod *ante terremotus* qui fiunt de mane *aliquando* accidit  
 tranquillitas in aere *et* magnum frigus. Ideo *enim* sol circa terremotum  
 apparet caliginosus *et* obscurus, quia uentus qui poterat rarefacere *aerem*  
*et* disgregare exalationes incipit subintrare *terram* circa tempus terremotus.  
 Similiter etiam ante *matutinos* terremotus fit tranquillitas, quia sicut *dictum*  
 200 *est, ut plurimum* accidit tranquillitas ante terremotus uento incluso infra  
 terram, *et* maxime hoc accidit circa magnos *terremotus*, quia quando  
 principium uenti *non* diuiditur ut una pars eius procedat infra terram et  
 alia *extra* terram, *set totum simul* feratur, tunc necesse est quod *magis* ualeat  
 uentus ad mouendum uel aerem uel terram. Ideo *autem* *accidit frigus* ante  
 205 terremotus, quia *exalatio* que secundum naturam suam *calida* est, utpote  
 adhuc aliquid retinens de uirtute caloris resoluentis ipsam, non est in aere,  
 set conuertitur infra terram. Licet autem exalatio *secundum se* sit calida,  
 tamen *uenti non uidentur esse calidi, quia* commouent *aerem plenum multo*  
*uapore frigido* cuius uaporis frigiditas magis sentitur per huiusmodi com-  
 210 motionem, *sicut etiam spiritus per os exsufflatus* secundum se *calidus est*

180 scilicet *V S*: idest *MO*: om. *B P*  
 beat *MO* 184 uento] et add. *MO*  
 sunt *M*: om. *cett.* non *PV*: om. *cett.*  
 terram om. *MO* (*homoeotel.*) 206 aliquid om. *MO*  
 209 uaporis] sapor *MO* 210 etiam *PV*: et *MO B*: om. *S*

181 Eoli] eloy *M*: eloi *O* 183 debebat] de-  
 187 que] quandoque add. *PV* 188 est *PV*:  
 194 quod *V*: quidem *cett.* 201-2 et . . .  
 208 plenum *PV*: om. *cett.*

199-200 sicut . . . *est*: Aristoteles, *Meteora* 2.8 (366a5-8).

et sic sentitur *de prope, sicut cum hyamus, set de longe frigidus* sentitur *propter eandem causam*, scilicet propter uaporem frigidum quem commouet, licet *non sit similiter manifestum* de flatu nostro sicut de uento *propter paucitatem*. Quando igitur talis exalatio concluditur infra terram terremotu instante, rationabile est quod circa illa loca *in quibus accidit* terremotus 215 uapores humidi resoluti in aere existentes faciant *frigus*.

367b7 Deinde cum dicit: *Idem autem causa* etc., ponit aliud signum. Et dicit quod hoc quidem, scilicet uentum concludi infra terram et cessare in aere, est *causa* eius quod consuevit accipi ut signum precedens terremotum, quia ante terremotum de nocte, *per diem* uel *post solis occasum*, si sit serenitas, 220 *apparet* quedam *nubecula subtilis* in longum *porrecta* et directa, per quod significatur quod uentus defecerit in aere et sit inclusus infra terram. Sicut enim *circa litora* maris, *quando* fuerit magnus uentus fluctuare faciens mare, *fiunt grosse et distorte regmines*, id est undositates, cum *autem* mare fuerit placatum, fiunt *subtiles et recte* propter paruam commotionem maris a 225 uento; sic accidit *in aere circa caliginem* quod *quando* est *tranquillitas* in aere, derelinquitur *recta et subtilis, tanquam* talis *nubecula* sic se habeat ad aerem sicut regmis ad mare.

367b19 Deinde cum dicit: *Propter eandem autem* <etc.>, ponit tertium signum. Et dicit quod *propter eandem causam*, scilicet tranquillitatem existentem 230 in aere, *aliquando* fit terremotus *circa eclipsim lune*, id est quam luna facit per sui interpositionem inter nos et solem, quod fit in eclipsi solis, quia *quando iam prope* est tempus quod luna interponatur inter nos et solem, *et lumen et caliditas solis nondum* est *deficiens ex aere*, set *iam* est *marcefactum*, id est debilitatum, tunc *fit tranquillitas* in aere, quia cum calor 235 debilis non possit eleuare exalationes in altum, feruntur *infra terram*, et tunc spiritus intra terram retentus *facit terremotum ante eclipses*. Set *et aliquando fiunt uenti ante eclipses* lunares, *in principio quidem noctis ante eclipses* que fiunt in media nocte, *in media autem nocte ante eclipses* que fiunt diluculo. Et *hoc accidit propter* hoc quod calor qui est in aere *a luna* 240 debilitatur *cum* luna appropinquat loco eclipsis; uirtute autem caloris lunaris

211 frigidus V: et frigus MO B: frigus P 212 causam om. MO 213 licet PV: similiter cett. (del. M) 220 per diem uel] de nocte per diem uel MO VS: de nocte post diem uel B: per diem uel (uel exp.) de nocte uel P 223 circa om. MO 224 regmines V: regiones M: regimines O (regiones praem., exp.): regiēs B: regrames P: uegumtes S undositates V: uentositates cett. 225 maris] magis MO 227 et om. MO B talis PV: quedam MO S: quod B 231 quam PV (corr. ex quas V?): quas cett. 234 lumen PV: lunam MO S: lunum B iam PV: om. cett. 235 marcefactum PV: m<sup>a</sup> accephanum M: m<sup>a</sup> acefanum O: factum B: no<sup>a</sup> a se factum S 238 noctis] rectus M: rectis O B P: notis V: om. S 239-40 in<sup>1</sup> . . . fiunt PV (et aliquando fiunt uenti post nocte<sup>1</sup> add. V): om. cett. (homoeotel.) 240 Et hoc] non MO

detinetur *aer* ne perturbetur *et* quiescit: luna enim habet manifestum effectum in conseruatione rerum inferiorum et precipue humidarum; et ideo diminuto calore lune turbatur aer *et fit* uentus. Et si *eclipsis* fit *tardior*, id est maiorem  
 245 moram habens, uentus etiam est durabilior.

Vel potest aliter exponi ut hoc etiam quod supra dictum est, quod *circa eclipses lune accidit fieri terremotum*, intelligatur de eclipsibus lunaribus; et quod dicit quod cum *iam prope fuerit interpositio*, non intelligatur de interpositione lune inter nos et solem, set de interpositione umbre terre;  
 250 et quod dicit *lumen et calidum quod est a sole nondum deficere ex aere*, intelligendum est de lumine et calido quod luna recipit a sole.

\* \* \*

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244 tardior] candidior *MO* 245 etiam est *P*: est etiam *inv. V*: et est *cett.*  
 247 eclipses . . . de *om. MO (homoeotel.)* 248 quod<sup>1</sup> *om. MO* 249 interpositione<sup>1</sup>  
*V*: interpositionibus *cett.* 250 et<sup>2</sup> *V*: *om. cett.* quod est *V*: *om. cett.*

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242-43 luna . . . humidarum: cf. Thomas, *Super Meteora* 2.1 n.7 (Leonine edition 3:338): "Aqua autem maris saepe movetur huc et illuc, et maxime secundum consequentiam ad motum lunae, quae secundum naturam propriam habet commovere humidum"; *Summa theologiae* 1.115.5 ad 1 (Leonine edition 5:546): "Manifestum est autem quod cerebrum humidissimum est omnium partium corporis, ut Aristoteles dicit: et ideo maxime subiicitur operationi lunae, quae ex sua proprietate habet movere humorem"; *ST* 1.102.1 ad 1 (Leonine edition 5:448-49): "Quidam autem dicunt quod Paradisus pertinebat usque ad lunarem globum, idest usque ad medium aeris interstitium, in quo generantur pluviae et venti et huiusmodi: quia dominium super huiusmodi evaporationes maxime attribuitur lunae." Cf. Thomas Litt, *Les corps célestes dans l'univers de saint Thomas d'Aquin*, Philosophes Médiévaux 7 (Louvain, 1963), 232-33.

246-51 Vel . . . sole: This is the interpretation of Alexander (ed. Smet, 190.36-191.43): "Dicit autem *circa eclipses lunae fieri terraemotum* frequenter *propter eandem causam. Quando enim iam prope fuerit umbra terrae*, obsistens et obtegens lumen quod a sole incidens ad lunam, ut neque quidem omnino relinquatur *lumen et calidum quod a sole*, quod exhibet luna aeri a sole accipiens, iam autem propter propinquitatem diligentis umbraculi marcefiat, *tranquillitas fit*. Quia enim infrigidatur locus qui super terram econtra transfertur spiritus in terram et *terraemotus ante eclipses facit*." Albert, like Thomas, suggests both interpretations; cf. Albert, *Meteora* 3.2.14 (*Opera omnia*, ed. Borgnet, 4:630-31): "Signum autem terraemotus praecedens ipsum, quod est signum et causa ipsius, est eclipsis solis in conjunctione lunae ad solem. . . . Si autem quis quaerat, utrum idem sit de eclipsi lunae intelligendum, quae fit ex umbra terrae? Dicendum quod in veritate subtractio luminis lunae aliquid cooperatur ad terraemotum: quia dicit Aristoteles quod luna est secundus sol, et movet lumine solis: attamen raro contingit ex eclipsi lunae, ideo quia luna in natura habet movere vaporem aquae et maris potius quam terrestrem vaporem et terram: solis autem motus fortior est in terra, et ideo eclipsis solis plus operatur ad hoc quam eclipsis lunae."

Set tunc uidetur duo contraria dicere: primo quidem enim dixit quod ante eclipses lunares fit tranquillitas deficiente calido, postea uero dixit quod ante eclipses lunares diminuto eius calido fit turbatio aeris.

Potest autem ad hoc dici quod diminutio calidi quod est a luna quandoque facit tranquillitatem, quando scilicet calor lune erat moderatus et temperatus ad mouendum exalationes ad generationem uentorum, unde diminutio caloris facit uentos cessare; quando autem caliditas lune erat maior, quasi uincens exalationes et disgregans eas, tunc calor lune facit tranquillitatem et diminutio eius caloris facit uentos. 255 260

Potest etiam dici quod parum ante eclipses lunares fit tranquillitas propter magnam diminutionem lunaris caliditatis; dicit autem Philosophus uentos fieri non immediate ante eclipses, set per mediam noctem ante, quia tunc aliquantulum remissus est calor lune, et non totaliter marcefactus, id est debilitatus. 265

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252 tunc *om. MO* primo *om. MO* quidem enim *V*: quidem quod *MO*:  
autem quod *B*: quidem quia *P*: enim quod *S* quod *V*: enim *MO*: *om. cett.*  
255 Potest] primo *MO* quandoque *V*: quando *cett.* 256 calor lune] lune calor  
*inv. MO* 257 mouendum exalationes *PVS*: modum exalationis *MO B* 258 lune  
*om. V* 262 lunaris caliditatis *PV*: lunarum caliditatis *M*: lunarum caliditas *O*: lunarem  
caliditatis *B*: lunarem claritatis *S* 264 non *PV*: ideo *MOS*: uero *B* 264-65 id  
est debilitatus *V*: *om. cett.*

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252-65 Set . . . debilitatus: cf. Alexander (ed. Smet, 191.55-192.80): "Dubitabit autem utique quis, qualiter quod nunc dictum est non repugnat prius dicto: tunc quidem enim dixit tranquillitatis causam fieri frigiditatem factam propter futuram eclipsim, nunc autem uentorum. Aut quando quidem amplior a luna fuerit caliditas, ita ut obtineat exhalationes, diminutio calidi remittit ipsas, quando autem fuerit moderata, diminutio cessare facit; et sic aliquando quidem tranquillitas, aliquando autem venti prius fiunt. Et non ante aequale tempus eclipsis tranquillitatem dicit fieri et uentos, sed in alio quidem uentos, in alio autem tranquillitatem; longe quidem enim distante adhuc eclipsi calidi temperies uentos movet, prope autem iam eclipsi existente eosdem hos uentos econtra transferri facit propter frigiditatem. Et cum uoluisset ostendere quod ante eclipses tranquillitas propter antiperistasin spiritus fit, ostendit quia ante spiritus motos existentes tranquillitas fit, illis translatis alibi. Et quod hoc dicat ipse signum quia non dicit: fiunt autem et venti *ante eclipses multotiens*, sed: *fiunt enim et venti*, dicens enim quod transferuntur, intulit hoc: *fiunt enim*.

Et cum ostendisset qui sunt qui transferuntur, adhuc serenitatem quidem dixit fieri, quando iam prope fuerit obstructio et nondum quidem fuerit totum amissum lumen et calidum quod a sole ex aere, iam autem marcescat. In generatione autem uentorum non hoc iam tempus dicit, sed in extremitatibus noctis quidem generationem uentorum ante eclipses factas in media nocte, media autem nocte ante illas quae in aurora. Et in tranquillitate quidem eo quod est marceferi calidum usus est, in generatione autem uentorum eo quod est attenuari calidum, intensio autem attenuationis marcefacit."

252-53 primo . . . calido: Aristoteles, *Meteora* 2.8 (367b19-25).

252-54 postea . . . aeris: Aristoteles, *Meteora* 2.8 (367b25-31).

## CAPITULUM XV

Cum autem fortis factus fuerit terremotus, non mox neque ad / semel cessat 367b32  
 agitans, set quod primo quidem usque ad circa / quadraginta dies agit, posterius  
 autem et ad <sup>a</sup>unum et ad duos annos notatur secundum eadem loca. Causa /  
 autem magnitudinis quidem multitudo spiritus et / locorum figure per qualia utique  
 fluxerit: qua quidem enim repulsus fuerit / et non facile pertranseat, maximeque  
 concutit et intus retinere <sup>5</sup>necessarium in resistentibus, uelut aqua non potens /  
 pertransire. Propter quod, sicut in corpore pulsus non repente / cessant neque cito,  
 set per moram marcefacta / passione, et principium a quo exalatio / facta fuit  
 et ortus spiritus palam quod non mox <sup>10</sup>omnem expendit materiam ex qua fecit  
 uentum quem / uocamus seismum. Quousque igitur consumatur reliquias horum,  
 / necesse agitare, debilius autem et usque ad hoc donec utique / minus sit exalatum  
 quam non possit mouere manifeste. /

Facit autem et sonos qui sub terra fiunt <sup>15</sup>spiritus, et eos qui ante terremotus; 368a14  
 et sine autem terremotibus / iam alicubi facti sunt sub terra. Sicut enim et percussus  
 aer / omnimodos emittit sonos, sic et percutiens ipse: nichil / enim differt: uerberans  
 enim simul et ipsum uerberatur omne. / Preuenit autem sonus motum, quia  
 subtiliorum parcium <sup>20</sup>est et quia magis per omne penetrat sonus spiritu. / Cum  
 autem minor fuerit quam ut moueat terram propter subtilitatem, / propter facile  
 quidem penetrare non potest mouere, quia / autem offendit ad solidas moles et  
 concauas et omnimodas / figuras omnimodum emittit sonum, ut aliquando uideatur  
<sup>25</sup>quod quidem dicunt prodigia uulgantes mugire terram. /

Iam autem et aque eruperunt factis terremotibus, set non / propter hoc aqua 368a26  
 causa motus, set si fuerit ex superficie / aut desubtus uim inferat spiritus, illam  
 mouens / est, sicut fluctuum uenti, set non fluctus <sup>30</sup>uentorum. Quoniam et terram  
 sic utique quis causet / passionis: euertitur enim agitata, quemadmodum aqua: /  
 effusio enim euersio quedam est. Set hec ambo quidem / causa ut materia: paciuntur  
 enim, set non agunt; spiritus autem / ut principium.

Vbi autem simul cum terremotu fluctus factus fuit, causa quando <sup>35</sup>contrarii facti 368a34  
 fuerunt spiritus. Hoc autem fit cum <sup>b</sup>agitans terram spiritus latum ab alio spiritu  
 / mare repellere quidem omnino non possit, propellens autem et / coartans ad  
 idem congregauerit multum: tunc enim necessarium / uicto hoc spiritu simul multum  
 pulsum a <sup>5</sup>contrario spiritu erumpere et facere cataclismum. / Fuit autem factum  
 hoc et circa Achaiam: extra quidem enim / erat auster, ibi autem boreas, tran-  
 quillitate autem facta et fluente / intro uento factus fuit et fluctus et terremotus

367b32 fortis *om.* *T*<sup>1</sup> 33 set] si *T*<sup>1</sup> 368a2 multitudo] et *add.* *T*<sup>1</sup> 13 quam  
 non *P*<sup>1</sup>*M*: quod non *V*<sup>2</sup>: quam ut *T*<sup>1</sup> 16 iam *T*<sup>1</sup>: 9iā *P*<sup>1</sup>*V*<sup>2</sup> facti sunt] *fci*<sup>s</sup> *T*<sup>1</sup>  
 22 quidem penetrare] penetrare quidem *inv.* *T*<sup>1</sup> 26 eruperunt] erumpunt *T*<sup>1</sup> 27 si  
*om.* *T*<sup>1</sup> 28 desubtus *T*<sup>1</sup>: desumptus *P*<sup>1</sup>*V*<sup>2</sup> 30 quoniam] quantum *T*<sup>1</sup>

simul, et / magis propter mare non dare perflationem <sup>10</sup>impetum facienti sub terra spiritui, set obsistere: uim enim inferencia / inuicem spiritus quidem terremotum fecit, / ypostasis autem spiritus cataclismum.

368b12 Secundum partem / autem fiunt terremotus terre, et sepe ad modicum / locum, uenti autem non; secundum partem quidem, cum <sup>15</sup>exalationes que secundum locum ipsum et uicinantem / conuenerint in unum, sicut et siccitates diximus fieri / et pluuias secundum partem. Et terremotus / quidem fiunt propter hunc modum, uenti autem non: hii / quidem enim in terra principium habent, ut ad unum omnes impetuentur, <sup>20</sup>sol autem non similiter potest; in aere autem suspensa magis / ut fluant, cum principium acceperint a solis latone, / iam secundum differencias locorum ad unum.

368b22 Quando quidem / igitur fuerit multus spiritus, mouet terram, ut autem tremor, / ad latum; fit autem raro et secundum aliqua loca <sup>25</sup>uelut pulsus, sursum desubtus; propter quod et minus / agitat hoc modo: non enim facile sic multum / conuenire principium: ad longitudinem enim multiplex eius que a / profundo exalatio. Vbicunque autem factus fuerit talis seismus, / egreditur multitudo lapidum sicut bulliencium in caldariis; <sup>30</sup>hoc enim modo facto seismo que / circa Sipolim euersa sunt, et campus uocatus Flegreum, / et que circa Ligusticam regionem.

368b32 In insulis autem / ponticis minus fiunt terremotus quam in hiis que ad terram: multitudo enim / maris infrigidat exalationes et prohibet <sup>35</sup>pondere et uim infert; adhuc autem fluit et non agitur <sup>a1</sup>obtenta a spiritibus; et quia multum occupat / locum, non in hanc, set ex hac exalationes fiunt, / et has consequuntur que ex terra. Que autem prope / terram pars sunt terre: intermedium enim propter <sup>5</sup>paruitatem nullam habet uirtutem. Ponticas autem non contingit moueri / sine mari toto a quo contente existunt. /

369a7 De terremotibus quidem igitur, et que natura et / propter quam causam fiunt, et de aliis accidentibus / circa ipsos, dictum est fere de maximis.

367b32 *Cum autem fortis factus fuerit* etc. Postquam Philosophus assignauit causam terremotus, hic assignat causam accidencium circa ipsos. Et circa hoc duo facit: primo assignat causam generalium accidencium; secundo causam quorundam particularium, ibi: *In insulis autem ponticis* <etc.>

Circa primum tria facit: primo assignat causam durationis terremotuum; 5 secundo causam quorundam effectuum eius, ibi: *Facit autem et sonos*

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368b10 spiritui *T*<sup>1</sup>: spm *P*<sup>1</sup>*V*<sup>2</sup>      20 suspensa] suspense *T*<sup>1</sup>      31 Sipolim] sypilon  
*T*<sup>1</sup>      euersa] conuersa *T*<sup>1</sup>      Flegreum] flegreus *T*<sup>1</sup>      369a1 obtenta] obtentum  
*T*<sup>1</sup>      2 hanc] hoc *T*<sup>1</sup>      4 enim *T*<sup>1</sup>: autem *P*<sup>1</sup>*V*<sup>2</sup>      5 moueri (cf. *Arist.*, κινῆσαι,  
*and Thomas, ad loc.*): mou'e *T*<sup>1</sup>*P*<sup>1</sup>*V*<sup>2</sup>      9 ipsos *T*<sup>1</sup>: ipsas *P*<sup>1</sup>*V*<sup>2</sup>

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4 particularium *PV*: accidencium *add. cett.*

5 terremotuum *PV*: terremotus *cett.*

<etc.>; tercio assignat causam diuersimode habitudinis ipsius ad terram, ibi: *Secundum autem partem* <etc.>

Dicit ergo primo quod quando *fuerit fortis terremotus, non statim cessat,*  
 10 *neque ad primam agitationem, set aliquando quod* est primum in eius  
*duratione agitatur usque ad quadraginta dies* interpolatis noctibus, et post  
 hoc usque *ad unum* uel *duos annos*. Cuius *causa* ex duobus sumitur, scilicet  
 ex multitudine uenti *et* ex figura *locorum* per que fluit uentus. Quando  
 15 *enim* loca subterranea sunt arta et solida ut spiritus *repulsus non facile*  
*pertranseat*, tunc *maxime concutitur et intus* maxime retinetur, sicut *aqua non*  
*potens* transire. Et ideo *sicut* quando ab aliqua passione, puta ire, incitatur  
*pulsus in corpore* humano, *non repente* cessat, *neque* in paruo tempore,  
*set* post magnam horam debilitata *passione*, sic accidit in uento mouente  
 terram. Sic igitur accidit duratio terremotus propter figuram loci. Accidit  
 20 etiam propter multitudinem materie, quia illud *principium ex quo facta fuit*  
*exalatio ex qua* natus est uentus concutiens terram *non* statim totam  
*materiam* exalationis *expedit* per resolutionem; *quousque* ergo illa materia  
*consumatur*, reliquie illius materie faciunt agitationem, set semper *debilius*,  
 quousque ueniat *ad hoc* quod *sit* ita modica exalatio quod *non possit mouere*  
 25 terram.

Deinde cum dicit: *Facit autem et sonos* <etc.>, assignat causam quorum- 368a14  
 dam effectuum terremotus. Et primo sonorum qui causantur in terra; secun-  
 do aquarum que erumpunt a terra propter terremotum, ibi: *Iam autem et*  
*aque* <etc.>; tercio fluctuum qui fiunt in mari, ibi: *Vbi autem simul* <etc.>

30 Dicit ergo primo quod uentus inclusus *sub terra* qui causat terremotum  
 aliquando *facit sonos ante* terremotum, *et* aliquando etiam fiunt soni *sine*  
 terremotu. *Sicut enim aer percussus*, utpote uirga uel corrigia discussa in  
 aere, facit *sonos*, ita etiam quando *ipse* percutit ad aliquod corporum: non  
*enim* est differentia quantum ad hoc utrum ipse uerberet uel uerberetur,

12 unum PV: annum cett. 13 ex<sup>2</sup> V: a P: om. cett. 16 potens] potest MO  
 ire V: in re MO S: int'e B: om. P incitatur V: indicatur MO P S: mendicatur B  
 18 sic] sicut MO 19 propter V: per cett. 20 etiam] et MO 23 reliquie  
 PV: relique cett. illius] scilicet MO 27 terremotus V: om. cett. 31 sonos  
 ante PV: om. cett. 32 percussus] percussit MO

16 puta ire: cf. Aristoteles, *De memoria et reminiscencia* 2 (453a26-28): "Vnde et ire et timores cum contra mouerint et contra mouentibus iterum hiis, non sedatur, set ad eadem contra mouent"; Thomas, *Sententia libri De sensu et sensato* 2.8 (Leonine edition 45.2:132.106-12): "Et dicit quod quando ira uel timor uel concupiscencia uel si quid huiusmodi mouetur contra aliquod obiectum, etiam si homines uelint in contrarium mouere retrahendo se ab ira uel a timore, non sedatur passio, set adhuc contra idem mouetur. Quod contingit quia commotio corporalis organi non statim quietatur."

32-33 utpote ... aere: cf. Alexander (ed. Smet, 193.5-6): "ut est videre in flagellis et in virgis."



quia *omne* quod uerberat *uerberatur* propter resistenciam uerberati. Huius- 35  
 modi *autem sonus* a spiritu infra terram incluso causatus precedit terre-  
 motum, licet simul fiat cum ipso, *quia est subtiliorum parcium, et quia sonus*  
*magis* potest penetrare *per* totum quam spiritus, id est uentus. Quod non  
 est sic intelligendum quasi sonus sit corpus partes et subtilitatem habens,  
 set quia in subtiliori aere potest fieri sonus quam uentus. Et ideo etiam 40  
 fiunt aliquando huiusmodi soni sine terremotu, quia aliquando uentus est  
*minor* causans sonum *quam* sufficiat ad mouendum *terram*, et *propter*  
*subtilitatem* de facili potest *penetrare* ut perueniat ad auditum nostrum, licet  
*non* possit *mouere*. Ideo autem causantur diuerse maneries sonorum, *quia*  
 spiritus inclusus impingit *ad moles solidas et concauas* et diuersis figuris 45  
 figuratas, ex qua diuersitate causatur diuersus modus sonorum, ita quod  
*aliquando uideatur* terra *mugire*, secundum quod *dicunt* illi qui antiquitus  
 uulgabant *prodigia*, ut aliquibus sacrificiis expiarentur: consuetum enim erat  
 apud antiquos ut quando inconsueta acciderent in aliqua regione, principibus  
 regionis nunciarentur ut a diuinis perquirerent quid pretenderent. 50

368a26 Deinde cum dicit: *Iam autem et aque eruperunt* <etc.>, assignat ratio-  
 nem de alio effectu terremotus. Et dicit quod aliquando *factis terre-*  
*motibus eruperunt aque* de terra. *Non* tamen *propter hoc* credendum est  
 quod *aqua* sit *causa* terremotus, sicut Democritus dixit, *set* uentus inclusus  
 in terra qui cum quadam uiolencia mouet aquam, *si* sit in *superficie* terre, 55  
 uel etiam sub terra et subuertendo terram, facit eam apparere, *sicut* et  
 fluctuatio accidit in mari propter uentos, *non* tamen *fluctus* sunt *causa*  
*uentorum*: hac enim ratione posset aliquis etiam *terram* dicere causam  
 terremotus, quia terra *agitata eueritur* propter terremotum, sicut *aqua*  
 effunditur: *effusio enim* aque *est quedam euersio* ipsius. *Set* tamen *hec* duo, 60  
 scilicet terra et aqua, in hoc se habent *ut materia*, quia *paciantur* et *non*  
*agunt* <. . .>.

368a34 Deinde cum dicit: *Vbi autem simul* <etc.>, assignat causam alterius  
 effectus. Et dicit quod quando *simul cum terremotu* fiunt *fluctus* in mari,  
*causa* est contrarietas uentorum: *hoc* enim *fit* quando uentus inclusus in 65  
 terra qui agitat *terram* *non* potest *repellere* totaliter *mare* quod contrafertur

37 licet PV: neque cett. 39 sic PV: om. cett. et om. MO 42 minor]  
 maior MO causans sonum PV: tamen solum M: causam solum O: sonum cau-  
 sans B: causans solium S 43-44 licet non PVS: neque M: neque uero O: nec-  
 non B 45 inclusus V: om. cett. 47 mugire M PV: tangore O: mugiri B: mugo-  
 rum S 50 pretenderent V (e<sup>l</sup> man. corr.): precederent MOS: accederunt B: pro-  
 tenderent P 52 alio V: aliquo cett. 58 etiam] in MO 59 propter V: per cett.  
 61 scilicet PV: om. cett. ut materia om. MO 62 Forsitan quicquid deest in  
 codicibus post agunt; cf. Arist., 368a33-34: spiritus autem / ut principium. 64 quod  
 om. MO 66 repellere] impellere MO

a contrario uento, set tamen impellendo *et* coartando congregatur *multum* de aqua maris circa eundem locum. Cum ergo interior uentus uincatur ab exteriori, *tunc* necesse est quod mare erumpat super terram *et* faciat quasi  
 70 diluuium. Et *hoc* dicit fuisse *factum circa Achaiam*, quia in mari flabat *auster*, infra terram *autem* erat quasi uentus borealis, set quando fuit facta tranquillitas, scilicet contraria impugnatione uentorum *et uento* boreali recurrente infra terram quasi repulso, accidit *simul et* fluctuatio *et terremotus*, *et maxime propter* hoc quod mare obsistebat *et non* dabat locum perflandi  
 75 uento subterraneo qui *impetum* faciebat; *et sic* dum contra se *inuicem uim* inferent mare *et* subterraneus uentus, uentus *quidem* subterraneus *fecit terremotum*, set *ypostasis spiritus*, id est mare quod subsistebat interiorem uentum, obtinendo fecit *cataclismum*.

Deinde cum dicit: *Secundum partem autem* <etc.>, assignat rationem 368b12  
 80 quorundam accidencium terremotus ex habitudine ipsius ad terram. Et primo quantum ad hoc quod terremotus accidunt secundum partem; secundum quantum ad diuersos motus quibus terra mouetur, ibi: *Quando quidem igitur* <etc.>

Dicit ergo primo quod *terremotus non fiunt* ita quod tota terra com-  
 85 moueatur, set *secundum aliquam partem*, *et* frequenter usque *ad modicum locum*, set *non* est ita de uentis. Ideo autem terremotus accidunt *secundum* partes, quia *exalationes que* fiunt in illo loco *et* in uicinis locis conueniunt *in unum*, *sicut et supra diximus* quod siccitates aliquando accidunt in aliqua parte, uel etiam pluuię, propter congregationem exalationum humidarum  
 90 in unum locum, *et eadem ratione terremotus fiunt* in aliqua modica parte terre. Set de uentis qui flant in aere *non* est sic, quia magis exalationes causantes eos disperguntur; uenti *enim* qui causant terremotus *habent* sub *terra principium*, ita quod *omnes* faciunt impetum *ad unum* locum; *sol enim non tantum potest* infra terram quantum potest supra terram, ut scilicet  
 95 possit impedire dissoluendo congregationem exalationum sub terra sicut impedit supra terram; set super exalationes suspensas, id est eleuatas, *in aere*

67 coartando] 9canda M: 9cādo O 70 circa PV: contra cett. 71 infra] in terra MO erat om. MO 72 uento boreali inv. MO 75-76 uim ... mare] idem et lacuna 9 litt. M: inde ferent mare O 77 subsistebat BS: subiciebat M: sub sisbat O: sb'tiebat P: sistebat V 78 cataclismum] calidissimum MO 81 partem PV: partes cett. 84-85 commoueatur PV: moueatur MOS: contra moueatur B 89 parte om. MO 90 fiunt om. MOS 94 potest<sup>2</sup> P: scilicet B: om. cett.

88 *sicut ... diximus*: Aristoteles, *Meteora* 2.4 (360b5 ff.).

96 id ... eleuatas: cf. Alexander (ed. Smet, 197.91): "elevatas tamen exhalationes."

*magis* potest sol, ita ut cum acceperint principium a motu solis resolvente et eleuante eas, tunc fluant ad aliquod unum secundum differentiam locorum; et sic quandoque fit boreas, quandoque auster, quandoque autem aliquis alius uentus. Fluxus autem subterranei uenti, cum confluit ad unum 100 ut post congregationem possit facere terremotum, non est nobis manifestus sicut fluxus uenti in aere ad unum tendentis; unde uenti apparent diffusi et ad longum spatium flantes, terremotus autem ad modicum.

368b22 Deinde cum dicit: *Quando quidem igitur* <etc.>, assignat causam de diuerso modo agitationis terre. Et dicit quod *quando fuerit multus spiritus* 105 congregatus, tunc *mouet terram*, et si sit motus in *latum*, fit quasi *tremor*; aliquando *autem fit*, set *raro*, in aliquibus locis motus terre per modum pulsus, quasi aliquid *desubtus* impellat terram *sursum*. Set hoc *minus* fit, quia *non* est *facile* quod tantum de exalatione conueniat in unum locum ut possit *sic* terram sursum impellere: multo *enim* est maior *exalatio* que 110 colligitur secundum *longitudinem* et latitudinem terre quam *que* potest colligi a *profundo*. Set *ubicunque factus fuerit* terremotus per modum pulsus, *egreditur* ibi *multitudo lapidum* bulliencium *sicut bulliencium in caldariis*, eo quod propter uehementiam motus causatur interius aliqua ignitio; et *hoc modo* dicit accidisse in subuersione quarundam terrarum. 115

368b32 Deinde cum dicit: *In insulis autem ponticis* <etc.>, assignat causam quorundam particularium accidencium. Et dicit quod *in insulis ponticis*, id est que sunt in profundo maris, *minus fiunt terremotus quam in insulis que sunt prope terram*, quia *multitudo maris infrigidat exalationes* ut non resoluantur ad generationem uentorum; et iterum mare suo *pondere pro-* 120 *hibet et uim infert* terre subsidenti ne possit moueri; iterum mare *fluit* propter uentos hac et illac, et sic *non agitur* terra ei subposita a uentis;

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97 acceperint PV: acceperit MO B: aere parte S 97-98 resolvente et eleuante  
V: resoluat in eleuando M: resoluent in eleuando O S: resoluent congelatione B: resol-  
uentur in eleuando P 98 fluant PV: fluunt M: fluent O B S 100 alius om. MO  
101 possit] posset MO 107 autem] non MO 108 sursum V man. corr.: desubtus  
MO: om. cett. 111 colligitur B PV: tollitur MO B man. corr. S 112 ubicunque  
PV B: illitata M: lacuna 6 litt. O: om. S 117 quorundam om. MO 120 resoluantur  
PV B: resoluatur MO S 122 hac et illac PV B: huc et illuc MO S

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99-103 et . . . modicum: cf. Alexander (ed. Smet, 197.94-198.00): "ad has quidem boreas, ad has autem auster, et alius aliud aliquid; fluentes autem sic non latent quemadmodum exhalationes sub terra confluentes ad idem, sed totus locus per quem fluunt habet ventum. Scismus quidem enim et siccitas et inundatio non est exhalationis fluxus; ventus autem et spiritus est ipsius talis exhalationis existentis super terram fluentem, neque fluere in parua parte terrae."

117-18 id . . . maris: cf. Alexander (ed. Smet, 198.19-20): "in insulis quae in medio pelagorum (quas dicit pontias)."

122 hac et illac: cf. Alexander (ed. Smet, 199.25): "ut hac et illac feratur."

et quia etiam mare *multum locum occupat* secundum altitudinem et profunditatem, *exalationes* maris *non* concluduntur *in* terra, *set* eleuantur  
 125 sursum, exalationes autem terre subsidentis mare *consequuntur* etiam exalationes maris in tendendo sursum, et ita non inclusis exalationibus sub terra non fiunt ibi terremotus. Set insule *que sunt prope terram sunt* quasi partes *terre*, unde eadem ratio est et de illis et de terra, ut in eis possit accidere terremotus: mare *enim* quod est *intermedium propter* suam  
 130 *paruitatem nullam habet uirtutem* ad impediendum terremotum. Set insulas que sunt infra mare multum *non contingit moueri* nisi totum mare moueretur quod eas circumstat, et hoc est difficile propter causas predictas.

Vltimo recapitulat quod dictum est; et est manifestum in littera.

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131 moueretur *PVS*: mouetur (mo<sup>r</sup>) *M*: moueatur *O B* 132 quod eas circumstat  
*B V*: in eis cum circumstat *M*: circumstans eas *O*: in eas circumstans *P*: in eas circumstat *S*

# ANALOGY AND EQUIVOCATION IN THIRTEENTH-CENTURY LOGIC: AQUINAS IN CONTEXT

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## INTRODUCTION

ONE of the outstanding features of the extensive literature on Aquinas's doctrine of analogy is the complete absence of any attempt to set him in the context of thirteenth-century logic.<sup>1</sup> Certainly frequent reference is made to Cardinal Cajetan; but Cajetan wrote over two centuries later, and he had his own philosophical agenda, which in many ways owed more to fourteenth-century developments than it did to Aquinas himself.<sup>2</sup> In this paper I intend to provide some essential background to Aquinas by examining how equivocation was handled by logicians, including the young Duns Scotus, between ca. 1230 and ca. 1300. I shall show how analogy entered the logic texts in the context of equivocation; and I shall argue that the emphasis on analogy *per attributionem*, the absence of the analogy of proportionality, and the development of a threefold classification of analogy all throw considerable light on Aquinas's own discussion of analogy, particularly as found in the passage from his *Sentences* commentary which

<sup>1</sup> An exception to this remark is provided by a paper which has just appeared: A. de Libera, "Les sources gréco-arabes de la théorie médiévale de l'analogie de l'être," *Les études philosophiques* [special issue on analogy] (1989): 319-45. De Libera, however, is more concerned with metaphysical than with logical issues. For a very interesting use of speculative grammar to interpret Aquinas on the language of the sacraments, see I. Rosier, "Signes et sacrements: Thomas d'Aquin et la grammaire spéculative," *Revue des sciences philosophiques et théologiques* 74 (1990): 392-436.

<sup>2</sup> For some details, see E. J. Ashworth, "Equivocation and Analogy in Fourteenth Century Logic: Ockham, Burley and Buridan" in *Historia Philosophiae Medii Aevi: Studien zur Geschichte der Philosophie des Mittelalters*, ed. B. Mojsisch and O. Pluta (Amsterdam, forthcoming). I am currently working on a study of Cajetan in relation to some fifteenth- and sixteenth-century Thomist logicians. Recent studies by Bruno Pinchard make some attempt to place Cajetan in his philosophical and theological context but have little to offer so far as relating him to fifteenth-century logic and semantics is concerned. See B. Pinchard, *Métaphysique et sémantique* (Paris, 1987); idem, "Du mystère analogique à la 'Sagesse des Italiens,'" *Les études philosophiques* (1989): 413-27. See also the critical notice of Pinchard's book by O. Boulnois, *ibid.*, 517-26.

was the focus of Cajetan's attention. While I do not wish to claim that paying attention to Aquinas's historical situation will by itself provide us with a definitive interpretation of his doctrines, I do believe that such an endeavour will enable us to rule out certain interpretations as inappropriate or unlikely, and that it will enable us to make sense of otherwise obscure remarks.

The present paper is the second part of a two-part study of Aquinas in relation to thirteenth-century logic. In the first part I discussed the general theory of language which provides the context for doctrines of equivocation and analogy.<sup>3</sup> In particular, I explained such key terms as *significatio*, *res significata*, and *modi significandi*. I also discussed the effects of context on equivocal and analogical terms. While the present paper stands by itself, reading it in conjunction with the other will lead to a fuller understanding of some of the details that I can mention here only in passing.

The texts of which I shall make most use fall into two groups. First, there are logical *summulae* from the first half of the thirteenth century, especially those by Peter of Spain and William of Sherwood from the 1230s and by Lambert of Auxerre and Roger Bacon from around 1250.<sup>4</sup> Second, there is a series of commentaries on Aristotle's *Categories* and *Sophistici Elenchi*. Those by Albert the Great are from before 1270,<sup>5</sup> but the rest were all written by logicians working at the University of Paris between 1270 and 1300.<sup>6</sup> Probably the earliest is Martin of Dacia's commentary on

<sup>3</sup> See E. J. Ashworth, "Signification and Modes of Signifying in Thirteenth-Century Logic: A Preface to Aquinas on Analogy," *Medieval Philosophy and Theology* 1 (1991): 39-67.

<sup>4</sup> Peter of Spain, *Tractatus Called Afterwards Summule logicales*, ed. L. M. de Rijk (Assen, 1972); William of Sherwood: C. H. Lohr with P. Kunze and B. Mussler, "William of Sherwood, *Introductiones in logicam*: Critical Text," *Traditio* 39 (1983): 219-99. For an English translation of Sherwood, see *William of Sherwood's Introduction to Logic*, trans. N. Kretzmann (Minneapolis, 1966). Lambert of Auxerre, *Logica (Summa Lamberti)*, ed. F. Alessio (Florence, 1971). Roger Bacon: A. de Libera, "Les *Summulae dialectices* de Roger Bacon: I-II. De termino, De enuntiatione," *Archives d'histoire doctrinale et littéraire du moyen âge* 53 (1986): 139-289; idem, "Les *Summulae dialectices* de Roger Bacon: III. De argumentatione," *Archives d'histoire doctrinale et littéraire du moyen âge* 54 (1987): 171-278.

<sup>5</sup> Albert the Great, *Liber de Praedicamentis [In Praed.]* in *Opera omnia*, ed. A. Borgnet, vol. 1 (Paris, 1890), 149-304; *Liber I Elenchorum. Tractatus II [In SE]* in *Opera omnia*, ed. A. Borgnet, vol. 2 (Paris, 1890), 537-56.

<sup>6</sup> For full details of dating, see the introduction to Incerti Auctores, *Quaestiones super Sophisticos Elenchos*, ed. S. Ebbesen, *Corpus Philosophorum Danicorum Medii Aevi* 7 (Copenhagen, 1977), *passim*. See also the introduction to Simon of Faversham, *Quaestiones super libro Elenchorum [In SE]*, ed. S. Ebbesen et al., *Studies and Texts* 60 (Toronto, 1984), *passim*. It will be noted that I am using only texts which have been printed, and nearly all of which are available in good modern editions. For references to manuscripts, see C. H. Lohr, "Medieval Latin Aristotle Commentaries," *Traditio* 23 (1967): 313-413; 24 (1968):

the *Categories*.<sup>7</sup> Next comes Aegidius Romanus (Giles of Rome) on the *Sophistici Elenchi*, together with the commentary on the *Categories* which has been ascribed to him.<sup>8</sup> From about 1275 we have an anonymous commentator on the *Sophistici Elenchi*, with a new series of questions dated around 1280.<sup>9</sup> There are two commentaries on the *Categories*, one by Peter of Auvergne,<sup>10</sup> and one by an anonymous author, Anonymus Matritensis.<sup>11</sup> From about 1280 we have John of Dacia, who included some material probably drawn from earlier questions on the *Sophistici Elenchi* in his *Summa gramatica*.<sup>12</sup> Simon of Faversham wrote on both the *Categories* and the *Sophistici Elenchi* ca. 1280.<sup>13</sup> Around 1295 we have the commentaries on the *Categories* and the *Sophistici Elenchi* by the young Duns Scotus.<sup>14</sup> Finally I shall make some references to the commentaries on the same works by Radulphus Brito, dating from around 1300.<sup>15</sup>

149-245; 26 (1970): 135-216; 27 (1971): 251-351; 28 (1972): 281-396; 29 (1973): 93-197. For a list of *Categories* commentaries from this period, see Robert Andrews, "Peter of Auvergne's Commentary on Aristotle's *Categories*: Edition, Translation and Analysis," 2 vols. (Ph.D. diss., Cornell University, 1988), 1:6-7. For references to manuscripts of commentaries on the *Sophistici Elenchi*, see the numerous works by Ebbesen listed in the bibliography of S. Ebbesen, "The Way Fallacies Were Treated in Scholastic Logic," *Cahiers de l'Institut du moyen-âge grec et latin* [CIMAGL] 55 (1987): 107-34.

<sup>7</sup> Martin of Dacia, *Quaestiones super librum Praedicamentorum* [In Praed.] in *Opera*, ed. H. Roos, *Corpus Philosophorum Danicorum Medii Aevi* 2 (Copenhagen, 1961), 153-263.

<sup>8</sup> Since the ascription is not certain, the dating of this text is not certain either. I base my remarks about the uncertainty of ascription on Andrews, "Peter of Auvergne's Commentary on Aristotle's *Categories*" 1:53 n. 36. For the two texts, I have used Renaissance editions: Aegidius Romanus, *Expositio supra libros Elenchorum* [In SE] (Venice, 1500); idem, *Expositio in Artem Veterem* [In Praed.] (Venice, 1507; rpt. Frankfurt, 1968).

<sup>9</sup> See Incerti Auctores, *Quaestiones*. The earlier set of questions will be referred to as the SF-commentary, the later as the C-commentary.

<sup>10</sup> R. Andrews, "Petrus de Alvernia, *Quaestiones super Praedicamentis*: An Edition," CIMAGL 55 (1987): 3-84.

<sup>11</sup> R. Andrews, "Anonymus Matritensis: *Quaestiones super librum Praedicamentorum*: An Edition," CIMAGL 56 (1988): 117-92.

<sup>12</sup> John of Dacia, *Summa gramatica* in *Opera*, ed. A. Otto, vol. 1, pt. 2, *Corpus Philosophorum Danicorum Medii Aevi* 1 (Copenhagen, 1955), 364-86. For a discussion of his sources, see Incerti Auctores, *Quaestiones*, p. XXXVI.

<sup>13</sup> For the *Categories* commentary, see *Quaestiones super libro Praedicamentorum* [In Praed.] in *Magistri Simonis Anglici sive de Faverisham Opera omnia I: Opera logica*, ed. P. Mazzarella (Padua, 1957), 69-148. For the questions on the *Sophistici Elenchi*, see n. 6 above.

<sup>14</sup> John Duns Scotus, *In librum Praedicamentorum Quaestiones* [In Praed.] in *Opera omnia*, 26 vols. (Paris, 1891-95), 1:437-538; *In libros Elenchorum Quaestiones* [In SE] in *Opera omnia* 2:1-80.

<sup>15</sup> Radulphus Brito, *Questiones super arte veteri* [In Praed.] (n.p., n.d.); copy in the Bibliothèque Mazarine, Paris. For a list of published extracts from his commentary on the *Sophistici Elenchi*, see Ebbesen, "The Way Fallacies Were Treated in Scholastic Logic," 130.

I shall not be in a position to demonstrate anything about originality or influence. Many of the texts I shall be using slightly postdate Aquinas; and there simply does not seem to be enough material to judge whether both these texts and Aquinas came out of the same logical tradition, or whether there were two separate developments, or whether Aquinas in fact influenced the logicians. I suspect that this third hypothesis is the least likely, on the grounds that the people teaching logic in the Arts Faculty at Paris were young masters of arts who were not yet trained in theology, whereas all theologians had been thoroughly trained in logic when they were undergraduates.

One final note: this paper is primarily a study of logic and logicians. Hence I shall not discuss the metaphysical and theological underpinnings of Aquinas's theory of analogy. I shall take it for granted that whatever he said about language he said in order to illuminate his doctrines about God as a being who is completely other than creatures, who is characterized by absolute simplicity, and in whose perfections creatures share by a fractured and incomplete participation. Nor shall I explore other thirteenth-century theologians, though their writings are equally important for a full understanding of the context in which Aquinas worked.

#### TERMINOLOGY: *AEQUIVOCUM*, *ANALOGIA*, *PROPORTIONALITAS*

In this paper I use the term "equivocation" in the medieval nonpejorative sense, since it covers both the case of homonymy ("two or more words having the same pronunciation and/or spelling") and polysemy ("one word having two or more senses").<sup>16</sup> The use of the word "equivocation" rather than "polysemy" also avoids the problem that proper names provided a standard example of pure equivocation, whereas one might not want to say that a proper name is polysemous.<sup>17</sup>

The term *aequivocum* was problematic for medieval logicians because the use of the phrase "aequivoca dicuntur" in Boethius's translation of Aristotle's definition (see below) made it sound as if Aristotle was referring to things, while equivocation seems to be primarily a problem of language use. Everyone adopted Boethius's solution whereby equivocals and univocals

<sup>16</sup> For these definitions, see G. Leech, *Semantics* (Harmondsworth, 1974), 228. Note that homographs with different pronunciations were not regarded as equivocal.

<sup>17</sup> On proper names and the Stoic view that a proper name has an intelligible significate, see S. Ebbesen, "Les Grecs et l'ambiguïté" in *L'ambiguïté: Cinq études historiques*, ed. I. Rosier (Lille, 1988), 27-28. Cf. Simon of Faversham, *In SE*, p. 154: "Coriscus enim significat naturam humanam ut individuata est."



are indeed things, but they have these characteristics only in relation to a name.<sup>18</sup> Two people called Socrates are equivocals by that name, but univocals when called human being. Simplicius had also explored the question at some length.<sup>19</sup> It was he who gave rise to the common sophism, "Equivocals are univocals," which could be solved by pointing out that each word correctly classified as equivocal is a member of the class of things falling under one univocal term, namely "equivocal."<sup>20</sup> In the thirteenth century, a special vocabulary was developed to deal with the issue of equivocal words as opposed to equivocal things. A thing was called *aequivocum aequivocatum*, and a word was called *aequivocum aequivocans*, with parallels for univocals. This vocabulary is found both in Robert Kilwardby's *Categories* commentary of around 1237 and in an English *Categories* commentary of around 1250.<sup>21</sup> Albert the Great spoke only of *res aequivocatae* and of *res univocatae*,<sup>22</sup> but the more elaborate classification is found in the *Categories* commentary ascribed to Aegidius Romanus as well as in various later sources.<sup>23</sup> This type of vocabulary was also sometimes extended to include analogy. Thus Simon of Faversham used the term *analogum* for a word and *analogatum* for a thing, as did Incerti Auctores.<sup>24</sup>

So far as the word "analogy" is concerned, my observations are merely preliminary. In Aristotle's Greek, *analogia* was used only in the sense of an equality of proportions involving at least four terms, but what came to be called *analogia* in thirteenth-century Latin covered what Aristotle called *pros hen* equivocation, or what Owen has dubbed "focal meaning."<sup>25</sup> As

<sup>18</sup> Boethius, *In Categorias Aristotelis libri quatuor* in PL 64:164, 165.

<sup>19</sup> Simplicius, *Commentaire sur les Catégories d'Aristote: Traduction de Guillaume de Moerbeke*, ed. A. Pattin, *Corpus latinum commentariorum in Aristotelem graecorum* 5, vol. 2 (Louvain and Paris, 1971), 47-48.

<sup>20</sup> Ibid., 40-41; Aegidius, *In Praed.*, fol. 15ra; Simon of Faversham, *In Praed.*, p. 75; Martin of Dacia, *In Praed.*, p. 167; Brito, *In Praed.*, signature f 2vb-4va. Cf. *Dialectica Monacensis*, ed. L. M. de Rijk in *Logica Modernorum*, 2 vols. in 3 (Assen, 1962-67), vol. 2, pt. 2, p. 564. Peter of Auvergne (Andrews, "Petrus de Alvernia," 16-17) held that the sophism was a case of the fallacy *secundum quid et simpliciter*; and Duns Scotus, *In Praed.*, p. 454a, gave this as a second possible answer.

<sup>21</sup> The first part of Kilwardby's commentary has been edited in Appendix B of P. O. Lewry, "Robert Kilwardby's Writings on the *Logica Vetus* Studied with Regard to Their Teaching and Method" (unpublished dissertation, Oxford, 1978), 367-78. For the vocabulary in question, see *ibid.*, 372 (Kilwardby) and 94 (the anonymous commentary). Peter of Spain used the word *univocans*; see *Summule logicales*, p. 188, line 15.

<sup>22</sup> Albert the Great, *In Praed.*, pp. 154b, 155b.

<sup>23</sup> Aegidius, *In Praed.*, fol. 15ra; Duns Scotus, *In Praed.*, pp. 451a, 453a; Walter Burley, *Super artem veterem Porphyrii et Aristotelis [In Praed.]* (Venice, 1497; rpt. Frankfurt, 1967), signature c 4vb; William of Ockham, *Expositio in librum Praedicamentorum Aristotelis*, ed. G. Gál in *Opera Philosophica* 2 (St. Bonaventure, N.Y., 1978), 139.

<sup>24</sup> Simon of Faversham, *In SE*, p. 79; Incerti Auctores, *Quaestiones*, p. 132.

<sup>25</sup> G. E. L. Owen, "Logic and Metaphysics in Some Earlier Works of Aristotle" in *Logic*,

I shall show below, the word in its new use was associated with translations of Aristotle's *Metaphysics* and of Arabic texts, and it was rapidly absorbed into the logic textbooks. Those who knew Greek or who read Pseudo-Augustine were aware that the Greek *analogia* was the same as the Latin *proportio*. In the case of Aquinas, this leads to a certain fuzziness of vocabulary. He uses the phrase "analogy or proportion" several times.<sup>26</sup> In one place in the *Sentences* commentary, given the example used, he could be employing *proportio* as Boethius had (see below),<sup>27</sup> but in other places this does not seem to be possible. Indeed, in *De veritate* he is forced to make a distinction between *proportio* as capturing Aristotle's *pros hen* equivocation (though Aquinas does not explain it in these terms) and *proportionalitas* as capturing Aristotle's *analogia*.<sup>28</sup> We may note that the passage in the *Nicomachean Ethics* where Aristotle defines analogy as an equality of ratios which involves at least four terms contains not the term *analogia* but the term *proportionalitas* in Grosseteste's translation.<sup>29</sup>

The word *proportionalitas* itself is found in at least one earlier logician, in the context of a section on the Topic from Proportion.<sup>30</sup> This is the only context I know in which logical attention was paid to the similarity

*Science and Dialectic: Collected Papers in Greek Philosophy* (London, 1986), 180-99. For further discussion of Aristotle, see J. Owens, *The Doctrine of Being in the Aristotelian "Metaphysics": A Study in the Greek Background of Mediaeval Thought*, 3d ed. (Toronto, 1978), 116-26; P. Aubenque, "Sur la naissance de la doctrine pseudo-aristotélicienne de l'analogie de l'être," *Les études philosophiques* (1989): 291-304. For some comments on thirteenth-century uses, see Andrews, "Peter of Auvergne's Commentary on Aristotle's *Categories*" 1:16-17. H. Lyttkens, *The Analogy between God and the World: An Investigation of Its Background and Interpretation of Its Use by Thomas of Aquino* (Uppsala, 1952), 77, says that the new use first appeared in Arabic writings. See also De Libera, "Les sources," *passim*.

<sup>26</sup> E.g., *1 Sent.* 31.2.1 ad 2; *Summa theologiae* 1.13.5 Solut. and 1-2.20.3 ad 3. Other people also used the phrase, e.g., Albert the Great, *In Praed.*, p. 154a; John of Dacia, *Opera*, vol. 1, pt. 1, p. 51.

<sup>27</sup> *1 Sent.* 31.2.1 ad 2: "in aequivocis quae dicuntur per respectum ad unum principium attenditur aliqua similitudo analogiae vel proportionis; et talis est multiplicitas hujus nominis principium."

<sup>28</sup> *De veritate* 2.11 Solut.

<sup>29</sup> *Aristoteles Latinus XXVI 1-3. Fasciculus Quartus: Ethica Nicomachea. Translatio Roberti Grosseteste Lincolnensis sive "Liber Ethicorum."* B. *Recensio Recognita*, ed. R. A. Gauthier (Leiden and Brussels, 1973), 458: "Proporcionalitas enim equalitas est proportionis, et in quatuor minimis." This is the version that Aquinas used for his commentary. Although it is sometimes attributed to William of Moerbeke, the identity of the man who revised Grosseteste's original text has not been established.

<sup>30</sup> William of Sherwood, *Introductiones*, pp. 260-61. He wrote, "Proportionalitas autem est similitudo proportionum." The notion may have come from Boethius's *Arithmetica*; see E. Wéber, "L'élaboration de l'analogie chez Thomas d'Aquin," *Les études philosophiques* (1989): 400 n. 37.

of proportions, and to the arguments to which these gave rise;<sup>31</sup> and analogy was not mentioned.

## BACKGROUND: ARISTOTLE AND HIS COMMENTATORS

### *The Categories*

The first and most obvious source for discussions of equivocation is Aristotle's *Categories* and three early commentaries on it. The *Categories* opens with three definitions: equivocals, univocals, and denominatives.<sup>32</sup> In Boethius's translation of the first two definitions we get the following:<sup>33</sup>

1. Those that have only a name in common but a different analysis of their substance in accordance with that name are said to be equivocals, e.g., "animal" <in relation to> man and what is painted.<sup>34</sup> ("Aequivoca dicuntur quorum nomen solum commune est, secundum nomen vero substantiae ratio diversa, ut animal homo et quod pingitur."<sup>35</sup>)

2. Those that have both a name in common and the same analysis of their substance in accordance with that name are said to be univocals, e.g., "animal" <in relation to> man, ox. ("Univoca vero dicuntur quorum et nomen commune est et secundum nomen eadem substantiae ratio, ut animal homo atque bos. . .")

<sup>31</sup> For a typical treatment, see Peter of Spain, *Summule logicales*, p. 74; Lambert of Auxerre, *Logica*, p. 134. For the origin in Boethius, see Boethius's "*De topicis differentiis*," trans. E. Stump (Ithaca and London, 1978), 55.

<sup>32</sup> Denominatives (Aristotle's paronyms), or concrete accidental terms, posed a problem of classification. In the strict sense they formed a distinct group, and as a result only substantival names could be classified as univocal; cf. *In libros Metaphysicorum* 7.2 n.1289 (ed. Cathala-Spiazzi), where Aquinas says that accidents are predicated of substance denominatively. Taken more generally, however, denominative terms were often said to fall between univocals and equivocals (see Simplicius, *Commentaire sur les Catégories*, 32) because they could themselves be either univocal or equivocal (see *ibid.*, 39).

<sup>33</sup> Aristotle, *Categories* (1a1-15) in *Aristoteles Latinus I 1-5: Categoriae vel Praedicamenta*, ed. L. Minio-Paluello (Bruges and Paris, 1961), 5.

<sup>34</sup> I have borrowed nearly all of this translation and the one which follows from the translation of Peter of Spain by N. Kretzmann and E. Stump, *The Cambridge Translations of Medieval Philosophical Texts: Vol. I. Logic and the Philosophy of Language* (Cambridge, 1988), 89.

<sup>35</sup> "Zoon" in Greek means both animal and painting. F. Desbordes, "Homonymie et synonymie d'après les textes théoriques latins" in *L'ambiguïté: Cinq études historiques*, 64, comments, "La traduction scrupuleuse de BOËCE . . . devait être passablement énigmatique pour un Latin, *animal* n'ayant jamais désigné en latin la représentation graphique, ni même une classe de tableaux représentant des êtres animés quelconques."

Three early commentaries on the *Categories* have to be taken into account. First, there is the *Categoriae decem* of Pseudo-Augustine, which is in fact a fourth-century work by an unknown Themistian.<sup>36</sup> This work was still being cited in the Renaissance.<sup>37</sup> Second, there is the commentary by Boethius. Third, there is the Greek commentary of Simplicius, dating from the sixth century, which became known to the Latin-speaking West when William of Moerbeke translated it in 1266.<sup>38</sup> It was used by Aquinas in *Summa theologiae* Ia IIae and other places.<sup>39</sup> Simplicius made particularly extensive use of earlier Greek commentators, but Pseudo-Augustine and Boethius also make use of such sources as Porphyry.<sup>40</sup> In particular, they took from Porphyry the division of equivocals into two main groups: chance equivocals ("fortuitu" in Pseudo-Augustine, "a casu" in Boethius) and deliberate equivocals ("voluntate" in Pseudo-Augustine, "a consilio" in Boethius). In the first case the occurrences of the equivocal term were totally unconnected, as when both the son of Priam and Alexander the Great were called Alexander.<sup>41</sup> In the second case, some intention on the part of the speakers was involved, and the occurrences of the equivocal term could be related in one of the following four ways:<sup>42</sup> 1. Similitude. Both a painted man and a real man can be called an animal. Notice that here we have Aristotle's main example of an equivocal term. 2. Proportion (*proportio*). Pseudo-Augustine notes that this is called *analogia* in Greek; and in William

<sup>36</sup> See *Aristoteles Latinus. I 1-5*, pp. LXXVII-LXXVIII. The text is reprinted *ibid.*, pp. 133-75, as *Paraphrasis Themistiana*.

<sup>37</sup> For instance, in Domingo de Soto, *Liber Praedicamentorum [In Praed.] in In Porphyrii Isagogen, Aristotelis Categorias, librosque de Demonstratione Absolutissima Commentaria* (Venice, 1587; rpt. Frankfurt, 1967), p. 109a.

<sup>38</sup> For the date, see Simplicius, *Commentaire sur les Catégories*, p. xi.

<sup>39</sup> *Ibid.*, p. xiv.

<sup>40</sup> For some discussion and references, see Desbordes, "Homonymie et synonymie," 66; S. Ebbesen, "Paris 4720A: A 12th Century Compendium of Aristotle's *Sophistici Elenchi*," *CIMAGL* 10 (1973): 12-13; Lyttkens, *Analogy*, 58-77. Greek commentators on the *Categories* other than Simplicius, such as Ammonius, were not used until the Renaissance.

<sup>41</sup> Sixteenth-century commentaries pointed out that even in cases such as these some intention might be involved. One might call one's son Plato in the hope of his becoming a philosopher, or Charles after one's father or in honour of the emperor. See Domingo de Soto, *In Praed.*, p. 119a; Franciscus Toletus, *In librum Categoriarum Aristotelis quae Praedicamenta dicuntur commentaria una cum quaestionibus in Opera omnia philosophica I-III* (Cologne, 1615/16; rpt. Hildesheim, 1985), 2:86a. Sten Ebbesen tells me that the point was made by Philoponus, whose *Categories* commentary was printed in 1503 and 1545, under the name of Ammonius. Albert the Great seems to have thought that some similitude was involved even in pure equivocation. He wrote of the standard example *canis* (*In Praed.*, p. 153a), "qualitas qua nomen illud diversis imponitur, per similitudinem translationis est una, ut canis quod imponitur latrabili, et marinis, et coelesti . . . proprietates sive qualitates a qua nomen imponitur, non nisi per similitudinem translationis est una."

<sup>42</sup> For all the divisions, see Pseudo-Augustine (*Paraphrasis Themistiana*, pp. 136-37); Boethius, *In Cat.*, col. 166; Simplicius, *Commentaire sur les Catégories*, 42-44.

of Moerbeke's translation of Simplicius only the word *analogia* is used.<sup>43</sup> Thus *principium* ("principle," "origin") is used of unity with respect to number and of point with respect to a line, or of both the source of a river and the heart of an animal. This corresponds to Aristotle's use of the Greek term. 3. From one (*ab uno*). "Medicinal" is used of books, instruments and potions because these descend from the art of medicine. 4. To one (*ad unum*). Food, potions, and exercise are called healthy with respect to health as an end. These two correspond to Aristotle's *pros hen* equivocation.<sup>44</sup> Simplicius noted that some people joined them together and called them *ut unum*. He also added that some placed them between univocation and equivocation on the grounds that unequal participation in a certain characteristic (*ratio*) was involved, so that more than the name was common.<sup>45</sup>

To this general classification Boethius and Simplicius added the case of metaphorical usage involving transferred names (*translatio*) as when one speaks of the foot of a mountain, or calls a leader a helmsman. They did not, however, subsume metaphor under equivocation. One reason for this separation between *translatio* and equivocation seems to be that equivocals were things, whereas *translatio* clearly has to do with words.<sup>46</sup> It was suggested that transferred names could count as equivocal only when the thing named lacked a label of its own. Thus "foot" said of mountain is not equivocal because the Greek word *hyporia* exists, but "foot" said of a table or couch is equivocal because there is no other word. The kind

<sup>43</sup> Simplicius, *Commentaire sur les Catégories*, 42; Pseudo-Augustine, *Paraphrasis Theomistiana*, p. 137. The latter speaks of *pro parte* rather than *proportio*.

<sup>44</sup> Porphyry and other Greek commentators follow the meaning of *pros hen* in identifying *pros hen* equivocation with (4) (*ad unum*) alone: see Lyttkens, *Analogy*, 59-61. This seems to be in line with *Nicomachean Ethics* 1.6 (1096b26-29), but there are reasons for using the notion of *pros hen* equivocation more loosely: see Owens, *The Doctrine of Being*, 218-19; Owen, "Logic and Metaphysics," 182 n. 7.

<sup>45</sup> Simplicius, *Commentaire sur les Catégories*, 43. De Libera, "Les sources," tends to argue (e.g., pp. 328, 330, 336, 337, 345) that analogical terms usurped the middle position assigned to denominative terms (see n. 32 above); but while it is obvious that the definition of a denominative term had an important role to play in the explanation of such analogical terms as *sanum*, it is less clear that any kind of usurpation took place. As we shall see below, the three modes of analogy give us a classification into terms which are analogical and univocal, terms which are analogical and strictly equivocal, and terms which are analogical but neither univocal nor equivocal in a strict sense; and the middle position assigned to denominative terms gives us a classification into terms which are denominative and univocal, terms which are denominative and equivocal, and terms which are denominative and analogical. *Album* ("light" or "clear") said of a physical object and of a voice was the standard example of an equivocal denominative term: Simplicius, *Commentaire sur les Catégories*, 39; Duns Scotus, *In SE*, p. 16a. The example is from Aristotle, *Topics* (106a25-30).

<sup>46</sup> I. Rosier, "Evolution des notions d'*equivocatio* et *univocatio* au XII<sup>e</sup> siècle" in *L'ambiguïté: Cinq études historiques*, 111-12.

of equivocation involved was said to be that involving similitude, though it seems that an appeal to proportion would have been equally appropriate, as Simplicius noted.<sup>47</sup>

These divisions are suggestive. Overall, they suggest a threefold division into chance equivocation, deliberate equivocation, and metaphor, as closely allied to equivocation.<sup>48</sup> In detail, the discussion of *proportio* suggests what later came to be known as the analogy of proportionality, since a comparison between two relationships is clearly involved. Leaving aside metaphor for the moment, the immediate effect of the general classification was not as great as one might suppose, since the Boethian divisions are not found in all authors. They are found in Robert Kilwardby's commentary on the *Categories*, and it is interesting to note that he included metaphor (*transumpcio*) in his list.<sup>49</sup> They are also found in Henry of Ghent.<sup>50</sup> Both Albert the Great and Aquinas refer to equivocation *a casu*.<sup>51</sup> In the fourteenth century the divisions are found in Burley and Ockham.<sup>52</sup> Two reasons for this relative neglect may be that late thirteenth-century commentaries on the *Categories* tend to be question-commentaries, in which no attempt was made to discuss every part of Aristotle's text, and that in the Summulist tradition not so much is said about the preliminaries to the *Categories*. The place where real attention is paid to divisions of equivocation, and hence of analogy, is in the commentaries on the *Sophistici Elenchi*, and in the sections of *summulae* on fallacies, where use was made of the *Sophistici Elenchi*. Even so, the Boethian divisions are rare in twelfth-century and later commentaries on the *Sophistici Elenchi*.<sup>53</sup> They are, however, referred to by Incerti Auctores.<sup>54</sup>

<sup>47</sup> Boethius, *In Cat.*, cols. 166-67; Simplicius, *Commentaire sur les Catégories*, 43.

<sup>48</sup> Indeed such a division is found, e.g., in *Dialectica Monacensis*, p. 559. Here, and in many other medieval sources, the word *transumptio* is used rather than *translatio*.

<sup>49</sup> "Et exemplificat in equiuocis de homine uero et de homine picto qui equiuocantur in hoc nomine, 'animal', equiuocatione que dicitur transsumpcio uel analogia uel similitudo uel ab uno ad unum" (Lewry, "Robert Kilwardby's Writings," 374).

<sup>50</sup> Henry of Ghent, *Summae Quaestionum Ordinariarum* (Reprint of the 1520 Edition), 2 vols., Franciscan Institute Publications, Text Series 5 (St. Bonaventure, N.Y., Louvain, Paderborn, 1953), vol. 2, fol. 270r. He makes a direct reference to Boethius but changes the vocabulary somewhat, listing the four types of "equivoca habitudine" as *proportio*, *relatio*, *similitudo*, and *descensus*, in that order.

<sup>51</sup> Albert the Great, *In Praed.*, p. 153a: "a casu et fortuna aequivoca." Aquinas, *1 Sent.* 31.2.1 ad 2: "in aequivocis quae per fortunam sunt et casum, ut canis, non attenditur similitudo aliqua." Cf. *1 Sent.* 35.1.4 Solut.

<sup>52</sup> Burley, *In Praed.*, signature c 5ra; Ockham, *In Praed.*, pp. 142-43. Burley cites Boethius and Simplicius but does not give full details of the four divisions of equivocation *a consilio*.

<sup>53</sup> Rosier, "Evolution des notions d'*equivocatio* et *univocatio*," 112 n. 15; Ebbesen, "Paris 4720A," 13.

<sup>54</sup> Incerti Auctores, *Quaestiones*, p. 117.

Before I move to the *Sophistici Elenchi*, attention should be drawn to two features of the definitions found in the *Categories*, namely the references to *nomen* and to *ratio substantiae*. It was taken for granted that *nomen* referred generally to any part of speech, and not just to a noun as opposed to a verb, but there was lengthy discussion of how a linguistic item could retain the unity of a name while being able to bear more than one signification, given that the very notion of *nomen* seems to tie it to one signification. Various solutions to this problem were proposed (see Appendix 2). With respect to *ratio substantiae* two points were routinely made. First, the presence of the word *substantia*, as Simplicius pointed out, is not intended to restrict the scope of discussion to substances.<sup>55</sup> Martin of Dacia said that *substantia* was taken for anything that could be referred to a second intention,<sup>56</sup> and Peter of Auvergne said that *substantia* was taken not for the genus of substance but for *essentia*.<sup>57</sup> Second, people agreed that *ratio*, or that which the name signified, had to cover not only definition in the strict sense<sup>58</sup> but also descriptions, which designate things by some property or other, in the nontechnical sense of "property."<sup>59</sup> Boethius and Simplicius noted that the most general genera and individuals had no definitions;<sup>60</sup> and Aquinas was to place special emphasis on limitations in the way we come to know external objects. Even where a definition is in principle possible, we may in fact know not the *quidditas* of the object but only some of its associated properties; and so far as God is concerned

<sup>55</sup> Simplicius, *Commentaire sur les Catégories*, 39.

<sup>56</sup> Martin of Dacia, *In Praed.*, p. 167.

<sup>57</sup> Andrews, "Petrus de Alvernia," 17. Cf. Duns Scotus, *In Praed.*, p. 451b. Since a univocal term has one *ratio substantiae*, and since each essence picks out one class of things, we may have here an explanation for Marrone's insistence that univocity involves sameness of things. See S. P. Marrone, "The Notion of Univocity in Duns Scotus's Early Works," *Franciscan Studies* 43 (1983): 349: "From Abelard to Thomas, with only minor deviation, the position of those who taught in the schools of Western Europe was that univocity entailed a sameness of name, concept and thing. . . ." However, I have not noticed sameness of thing as a subject of explicit discussion in the authors I have read.

<sup>58</sup> See the frequently cited Aristotelian tag, "*ratio quam significat nomen est definitio*" (*Metaphysics* 4.7 [1012a24-25]). I take the Latin from J. Hamesse, *Les Auctoritates Aristotelis: Un florilège médiéval. Étude historique et édition critique*, Philosophes médiévaux 17 (Louvain and Paris, 1974), p. 124 (116). I intend to locate quotations from Aristotle in *Les Auctoritates Aristotelis* wherever possible, since this florilegium (which dates between 22 November 1267 and the year 1325) is an extremely useful guide to the commonplace tags picked up and used by almost all logical writers. For the phrase in Aquinas, see, e.g., *ST* 1.13.1 Solut., 4 Solut., 8 ad 2.

<sup>59</sup> Boethius, *In Cat.*, col. 166; Simplicius, *Commentaire sur les Catégories*, 39. Cf., e.g., Bacon, *Summulae* 1, p. 186. The word I have translated as "property" is *proprietas* and not *proprium*.

<sup>60</sup> Boethius, *In Cat.*, col. 166; Simplicius, *Commentaire sur les Catégories*, 39.

we will never know his *quidditas* in this life.<sup>61</sup> A further problem had to do with the nature of the *ratio*. For Aquinas it was to be identified with the *verbum mentale* or mental conception, but in others there was a tendency to identify it with an Avicennian common nature which was distinct from both the mental conception and external objects.<sup>62</sup> In late thirteenth-century discussions of analogy, it is not always clear whether *ratio* refers to a conception (analysis) or to a nature (characteristic).

### The *Sophistici Elenchi*

In commentaries on the *Sophistici Elenchi* the framework for discussion was provided by Aristotle's division into three modes of equivocation. He wrote, "There are three varieties of equivocation and amphiboly: one when either the phrase or the name principally signifies more than one thing . . . ; another when we are accustomed to speak in that way; a third when words put together signify more than one thing, but taken alone <signify> simply. . . ."<sup>63</sup>

These terse remarks and their setting in a discussion of fallacies allowed commentators to expand on the *Categories* account of equivocation in a number of ways. In the first place, the focus was no longer on signification alone but also on consignification. This notion was used in at least three contexts.<sup>64</sup> First, it was used to pick out syncategorematic terms, where these are defined as having only consignification. Second, it was used to deal with temporal reference, since verbs were said to consignify time. Third, it was equated with grammatical *modi significandi*. Here, there were two main groups. Essential *modi significandi* included part of speech, such as being a noun, verb, or adjective, whereas accidental *modi significandi* included such features as case, number, and gender. Aquinas's main concern was with parts of speech, but in some sources the *modi significandi* were spoken of as primarily accidental.<sup>65</sup> In thirteenth-century discussions, two

<sup>61</sup> ST 1.13.2 ad 1, ad 2, ad 3, 8 ad 2. Cf. ST 1.2.2 ad 2.

<sup>62</sup> See, e.g., Simon of Faversham, *Quaestiones super libro Perihermeneias* in *Opera omnia I: Opera logica*, p. 155. For further details, see the paper cited in n. 3 above.

<sup>63</sup> "Sunt autem tres modi secundum aequivocationem et amphiboliam: unus quidem quando vel oratio vel nomen principaliter significat plura, ut piscis et canis; alius autem quando soliti sumus sic dicere; tertius vero quando compositum plura significet, separatum vero simpliciter . . ." (Aristotle, *Sophistici Elenchi* [166a15-20], quoted from Boethius's translation in *Aristoteles Latinus VI 1-3: De Sophisticis Elenchis*, ed. B. G. Dod [Leiden and Brussels, 1975], 9).

<sup>64</sup> For full details, see the paper cited in n. 3 above.

<sup>65</sup> The *Summe Metenses* said that the *modi significandi* of a word are those which order it towards construction and embrace case, gender, number, tense, and person: see *Summe*



examples of accidental *modi significandi* were of particular importance. One has to do with the word *episcopi* whose diversity of *modi significandi* in the sense of case is what gives rise to equivocation. In the standard example, "The bishops [*episcopi*] are priests, these asses are the bishop's [*episcopi*]; therefore these asses are priests,"<sup>66</sup> *episcopi* can be either genitive singular or nominative plural. Accidental modes also included time as is shown through discussion of the second standard example, that of *laborans*, as it appears in the paralogism, "Whoever was being cured is healthy, the sufferer [*laborans*] was being cured; therefore the sufferer is healthy."<sup>67</sup> Here the consignification of time was said to be at issue because *laborans* can signify a present sufferer or one who suffered in the past. However, an important distinction was often made between the two examples. Some accidental modes, such as time, were said to be absolute, and hence unaffected by context; others, notably case, were respective or relational, and could be affected by sentential context.<sup>68</sup>

A second way in which commentators on the *Sophistici Elenchi* went beyond what had been said in discussions of the *Categories* has to do with metaphorical use or transferred meaning. Aristotle's reference to how we are accustomed to speak indicated clearly that metaphor was to be included under the second mode of equivocation. This, however, raised the question of how Aristotle's three modes were to be related to Boethius's divisions. Aristotle's first mode seemed to be most appropriately equated with Boethius's first division, chance equivocation; and Aristotle's third mode, which dealt with words in context, seemed to be unrelated to Boethius's divisions, since these were thought to be concerned with the signification of words taken by themselves. As a result, Aristotle's second mode was equated with Boethius's second division, deliberate equivocation; and Boethius's own uncertainty about the relationship between metaphor and equivocation frequently affects the way in which Aristotle's second mode was described.

The third new issue concerned the role played by the context of an equivocal term. Aristotle's description of the third mode of equivocation

*Metenses*, ed. De Rijk in *Logica Modernorum*, vol. 2, pt. 1, pp. 475-76. Cf. Lambert of Auxerre on "consignificare": "Dicitur autem <nomen> consignificare illud quod ei accidit ultra principale significatum ut 'homo' significat nominativum casum et numerum singularem, et alia que sibi accidunt" (*Logica*, p. 9).

<sup>66</sup> Kretzmann, *William of Sherwood's Introduction to Logic*, 136. As Kretzmann points out (in his note 23) only the spoken version has the intended effect in English.

<sup>67</sup> Ibid., 136. The example comes from Aristotle, *Sophistici Elenchi* (166a1-6).

<sup>68</sup> See Peter of Spain, *Summule logicales*, pp. 114-15, where he refers to case as an *accidens respectivum*, and also speaks of *accidentia absoluta* such as time. See also Incerti Auctores, *Quaestiones*, pp. 322-23; Duns Scotus, *In SE*, pp. 26a-27a.

seemed to allow for the effect of context on signification or consignification, but one can ask whether a word can be given a new signification or consignification simply by virtue of some adjunct. Thirteenth-century logicians were generally willing to accept some grammatical features such as case as being relational, but there was a strong belief that the signification of a word and most of its *modi significandi* were fixed by imposition and that they could not be altered by sentential context or speaker intention.<sup>69</sup> As we shall see, some people, including Peter of Spain and Duns Scotus, said that Aristotle's description of the third mode applied only to amphiboly, and that the third mode of equivocation had nothing to do with context. Instead, it arose from the consignification which the word already possessed.

### The *Physics* and *Metaphysics*:

#### The Appearance of the Term *Analogia*

The question of how types of equivocation were to be categorized and described became more complex in the thirteenth century with the recovery of Aristotle's *Physics* and *Metaphysics*, and with the associated entrance of new uses of the term *analogia* on the philosophical scene. The problem presented by the *Physics* is relatively minor, but it does illustrate the effect of authority on logical discussion. As translated into Latin it contained a phrase to the effect that equivocations are hidden in genera ("Aequivocationes latent in generibus"<sup>70</sup>) and virtually every late thirteenth-century author felt obliged to fit this claim into the framework of equivocation and analogy, even if the consensus was that in the end the use of genus terms was univocal.

The importance of the translations of Aristotle's *Metaphysics*, and of Averroes's commentaries on it, among other sources, is that they somehow led to the introduction of the word "analogy" in relation to the discussion of *ens* and how *ens* could be predicated of both substance and accidents without being a univocal term. The primary source for the discussion of *ens* is obviously Aristotle's *Metaphysics*, which was available in various Latin versions from the mid-twelfth century on;<sup>71</sup> but the Arabic sources are equally important. For instance, in Algazel's *Logic* we read, "*Convenientia*,

<sup>69</sup> For full details, see the paper cited in n. 3 above.

<sup>70</sup> Aristotle, *Physics* 7 (249a22-25); *Les Auctoritates Aristotelis*, p. 155 (193).

<sup>71</sup> E.g., *Metaphysics* 4.2 (1003a33-35) in *Aristoteles Latinus XXV 2: Metaphysica Lib. I-X, XII-XIV. Translatio Anonyma sive "Media,"* ed. G. Vuillemin-Diem (Leiden, 1976), 60: "Ens autem multis quidem dicitur modis, sed ad unum et unam aliquam naturam et non equivoce, sed quemadmodum salubre omne ad sanitatem. . . ." Cf. *Metaphysics* 7.4 (1030a28-1030b13), *ibid.*, 128-29.

i.e., terms related by agreement, come halfway between univocals and equivocals, e.g., *ens* as said of substance and of accident . . . for substance has *esse* first, then accident <has *esse*> through something else; hence *esse* belongs to them *secundum prius et posterius*.”<sup>72</sup> It is surely as a result of such passages that the word *ens* starts turning up, usually paired with *sanum*, as an example of what is said *secundum prius et posterius* in such logic texts as Peter of Spain’s *Tractatus*.<sup>73</sup> Aristotle’s denial in *Metaphysics* 4.2 (1003a34) that *ens* was equivocal was easily taken as a denial that it is equivocal according to the first mode of equivocation, or pure equivocation as Aquinas sometimes calls it;<sup>74</sup> and this approach served to reconcile Aristotle’s remark with Porphyry’s well-known claim in his *Isagoge* that *ens* was said equivocally.<sup>75</sup> As a result, the point made by Algazel and by Averroes in his commentary on Aristotle’s *Metaphysics* to the effect that *ens* is said in a way which is neither equivocal nor univocal but falls in between<sup>76</sup> was normally taken to mean that it was said in accordance with the second mode of equivocation, or analogy, and in the *Les Auctoritates Aristotelis* reference to analogy is confidently added both to Aristotle’s text and to Averroes’s commentary.<sup>77</sup> As Alain de Libera has remarked, the

<sup>72</sup> “*Convenientia sunt media inter univoca et aequivoca, ut ‘ens,’ quod dicitur de substantia et accidente. . . . Esse vero prius habet substantia; deinde accidens, mediante alio. Ergo est eis esse secundum prius et posterius*” (C. H. Lohr, “*Logica Algazelis*: Introduction and Critical Text,” *Traditio* 21 [1965]: 246).

<sup>73</sup> Peter of Spain, *Summule logicales*, p. 177.

<sup>74</sup> See, e.g., *ST* 1.13.5 Solut. Aquinas allows equivocation in a broad sense to include analogy: *ST* 1.13.10 ad 4.

<sup>75</sup> *Aristoteles Latinus I 6-7: Categoriarum Supplementa: Porphyrii Isagoge Translatio Boethii et Anonymi Fragmentum vulgo vocatum “Liber Sex Principiorum,”* ed. L. Minio-Paluello with B. G. Dod (Bruges and Paris, 1966), 12: “Vel, si omnia quis entia vocet, aequivoce (inquit) nuncupabit, non univoce.” In *Les Auctoritates Aristotelis*, p. 300 (7), words have been added so that the phrase reads “Si aliquis omnia praedicamenta entia vocet aequivoce et non univoce, ea nuncupabit, id est analogice.” Cf. Peter of Spain, *Summule logicales*, p. 19: “Licet enim ‘ens’ dicatur de illis decem, tamen equivoce sive multipliciter dicitur de ipsis, et ideo non est genus.” For the reconciliation of Aristotle and Porphyry, see Aquinas, *ST* 1.13.10 ad 4.

<sup>76</sup> Averroes, *Aristotelis Opera cum Averrois Commentariis* (Venice, 1562-74: rpt. Frankfurt, 1962), vol. 8, fol. 65rb: “. . . nomen ens dicitur multis modis, & non aequivoce, sicut canis, qui dicitur de latrabili & marino: neque vniuoce, vt animal de homine, & asino: sed est de nominibus quae dicuntur de rebus atributis eidem, et sunt media inter vniuoca & aequiuoca.”

<sup>77</sup> *Les Auctoritates Aristotelis*, p. 122 (88) and p. 123 (107). Roger Bacon wrote, “in IV *Metaphysicae* Aristoteles dicit quod ens non est aequivocum sed analogum” (K. M. Fredborg, L. Nielsen, and J. Pinborg, “An Unedited Part of Roger Bacon’s *Opus maius: De signis*,” *Traditio* 34 [1978]: 116). It would be interesting to have a study of the use of the words *analogus* and *analogia* in thirteenth-century translations. Lyttkens remarks (*Analogy*, 77) that the word “analogy” does appear in the translation of Averroes’s *Epitome* where he says of *ens* that it must signify the categories “aliquo modorum analogiae”: see Averroes,

use of the word *convenientia* in Latin translations of Avicenna and Algazel is also important,<sup>78</sup> for Albert the Great explicitly claimed in his *Predicables* commentary that *analogia* were what the Arabs called *convenientia*.<sup>79</sup> All these developments gave a new direction to discussions of equivocation in logic texts.

## THE CLASSIFICATION OF EQUIVOCATION AND ANALOGY BEFORE 1270

### Early Discussions of Equivocation

I shall ignore the wealth of material from the twelfth and very early thirteenth centuries<sup>80</sup> and concentrate on two well-known *summulae* from the 1230s, those of Peter of Spain and William of Sherwood. I shall also consider Roger Bacon's *Summulae* from ca. 1250. As I have already mentioned, all these authors worked within the framework of the three modes of equivocation presented in the *Sophistici Elenchi*.

Peter of Spain makes his main division on the basis of the *significatio-consignificatio* distinction.<sup>81</sup> The third mode concerns only *consignificatio* and arises, according to him, when a term such as *laborans* is used in paralogsms. He makes it clear that a diversity not of significates but of *modi significandi* is involved, and that the term has this diversity before it enters a sentence.<sup>82</sup> Where context does make a difference, as with *episcopi* and the paralogsms in which that word figures, we have, not equivocation, but amphiboly.<sup>83</sup> The first two modes concern signification. The first mode, in which diverse things are signified equally, is pure equivocation; the second mode arises when diverse things are signified *secundum prius et posterius*. One of his examples is "healthy" said of urine and of an animal. He also claims that transferred meaning (*transumptio*) can be reduced to the second mode of equivocation. When we say that fields laugh, the prior sense of

*Aristotelis Opera*, vol. 8, fol. 364ra. However, Deborah Black tells me that the *Epitome* was not translated until the Renaissance.

<sup>78</sup> De Libera, "Les sources," 330-34. For Avicenna, see n. 132 below. Cf. Aquinas, quoted in n. 140.

<sup>79</sup> Albert the Great, *Liber de Praedicabilibus* in *Opera omnia* 1:11a.

<sup>80</sup> For details of this material, see De Rijk, *Logica Modernorum*, and Rosier, "Evolution des notions d'*equivocatio* et *univocatio*."

<sup>81</sup> Peter of Spain, *Summulae logicales*, p. 105

<sup>82</sup> T. S. Maloney, "Roger Bacon on Equivocation," *Vivarium* 22 (1984): 87, obscures this point by gratuitously adding a reference to context in his account of Peter's divisions.

<sup>83</sup> Peter of Spain, *Summulae logicales*, p. 108. He treated case as a relational accident, the kind of *modus significandi* which functions within a sentential context: see pp. 114-15.

“laugh,” which arose through imposition, is transferred to the fields through habit (*assuetudo*). One may conjecture that “healthy,” unlike “laugh,” has its posterior sense by imposition rather than transference. Although he does not use *ens* as an example here, he had remarked earlier that *ens* was equivocal because different *rationes* were involved,<sup>84</sup> and later, in his discussion of the fallacy of many questions as one, he writes that one kind of unity is “by proportion, and it is that which is said *secundum prius et posterius*, as *ens* is said of all beings, ‘healthy’ of all healthy things, and ‘good’ of all good things.”<sup>85</sup> In the *Dialectica Monacensis*, whose dating is uncertain, *ens* and *sanum* had both been placed in the group of words said *secundum prius et posterius*.<sup>86</sup> It should be noted that Peter departs from Aristotle in two places in his discussion of equivocation. “What we are accustomed to say” plays a subordinate role in the second mode, and the effect of conjoining words is not referred to in the third mode. On the other hand, when Peter subsequently discusses the modes that are common to amphiboly and equivocation, because they involve complex terms, custom and the effect of conjoining words regain their importance.<sup>87</sup>

The variety of positions that could be adopted is seen when we compare Peter of Spain with William of Sherwood. The latter’s main division—between words which signify more than one thing by themselves and those which do so only by virtue of context—immediately distinguishes him from Peter of Spain.<sup>88</sup> In his brief analysis of the three modes, he includes varieties of consignification under the first mode, giving the parallogism involving *episcopi* as his example. The second mode of equivocation involves only improper or transumptive signification; and the third mode of equivocation arises when a word such as *laborans* has a changed signification or consignification as a result of its adjuncts. William’s explanation is particularly

<sup>84</sup> Ibid., p. 25.

<sup>85</sup> Ibid., p. 177. It should be noted that Peter links *proportio* with *similitudo*: see pp. 134–35.

<sup>86</sup> *Dialectica Monacensis*, pp. 560–61, 607. Grabmann thought it was posterior to Peter of Spain: see citation in De Rijk, *Logica Modernorum*, vol. 2, pt. 1, p. 408; but De Rijk put it “as early as the second half of the twelfth century” (ibid., p. 410). K. Jacobi argues that it is later than De Rijk thinks (“Wilhelm von Shyreswood und die *Dialectica Monacensis*” in *English Logic and Semantics, from the End of the Twelfth Century to the Time of Ockham and Burleigh*, ed. H. A. G. Braakhuis, C. H. Kneepkens, and L. M. de Rijk, *Artistarium Supplementa* 1 [Nijmegen, 1981], 100). Certainly I find that the discussion of equivocation has a later ring to it.

<sup>87</sup> Peter of Spain, *Summule logicales*, p. 109. On p. 99 he had claimed that Aristotle himself seemed to want to treat the modes of equivocation taken alone differently from the modes common to equivocation and analogy. This enabled him to differ from Aristotle while retaining Aristotle’s definitions.

<sup>88</sup> William of Sherwood, *Introductiones in logicam*, pp. 276–77. His account of the threefold division has earlier roots: see texts in De Rijk, *Logica Modernorum*, vol. 1, pp. 289–90, 499.

interesting because it is here, and not in the second mode, that he deploys the phrase *per prius et posterius*. He agreed that a word must have its signification before it enters a sentence, but he argued that there are some words whose “signification or consignification is a single concept (*intentio*) participated in by what is more than one thing with respect to earlier and later”<sup>89</sup> and in these cases variation can occur. *Laborans* taken by itself consignifies the present, but through its association with a past-tense verb it comes to consignify the past as well.

Roger Bacon’s framework is similar to that adopted by William of Sherwood, but is somewhat different in detail.<sup>90</sup> The first mode, which occurs when a word signifies more than one thing principally and equally, included equivocation arising from signification, consignification, and supposition,<sup>91</sup> as well as from the presence of certain types of syncategorematic and relative terms. The *episcopi* case fell under consignification. The second mode involved transference of meaning (*transumptio*) and was said to include *ens*, on the grounds that *ens* signifies substance properly and accident only improperly. The third mode involved the effect of sentential context. Bacon also added a new type of equivocation, which was to become his hallmark. This was the equivocation of appellation, as he dubbed it here, whereby a term was used equivocally when its reference was extended from present existents to past or future nonexistents.<sup>92</sup> He ended by considering the case of *sedens* (closely analogous to *laborans*) in the paralogism “whoever was getting up is standing, the sitting man was getting up; therefore the sitting man is standing.”<sup>93</sup> It can, he claims, be fitted into any one of the four types of equivocation. It can be said to signify both present and past time equally; or it can be said to consignify present time properly and past time less properly; or it can be said to change its grammatical function according

<sup>89</sup> Kretzmann, *William of Sherwood’s Introduction to Logic*, 138. The Latin reads “Et hoc est non in omni dictione, sed in illa, cuius significatio vel consignificatio est una intentio participata a pluribus secundum prius et posterius” (William of Sherwood, *Introductiones in logicam*, p. 277).

<sup>90</sup> Bacon, *Summulae* III, pp. 241–43.

<sup>91</sup> In the twelfth century there was hesitation about the classification of fallacies involving supposition, and although they were often placed under equivocation, they were eventually moved to figure of speech or accident: see Rosier, “Evolution des notions d’equivocatio et univocatio,” 155–56 and passim. Bacon’s inclusion of supposition under mode one equivocation was unusual.

<sup>92</sup> For a survey of the literature on this problem, see T. S. Maloney, *Roger Bacon, Compendium of the Study of Theology: Edition and Translation with Introduction and Notes* (Leiden, 1988), 13–21. In his paper, “Roger Bacon on Equivocation,” Maloney does not note that Bacon added this further type of equivocation to what Maloney describes (p. 85) as a “traditional exposé.”

<sup>93</sup> See Aristotle, *Sophistici Elenchi* 165b38–166a1.

to context, being now a participle, now a name; or it can be said to refer to both present sitters and currently nonexistent past sitters.<sup>94</sup>

### The First Discussions of Analogy in Logic Texts

Analogy seems to have made its final entry into the logical texts around the time at which Bacon was writing.<sup>95</sup> The *Summe Metenses*, once dated at around 1220, has been quoted to show that the terminology of analogy was used early in the first half of the thirteenth century, but it is now thought to be by Nicholas of Paris and dated around 1250.<sup>96</sup> The text makes a major distinction between equivocation taken strictly (*proprie*), to include only words that are actually endowed with multiple signification, and equivocation taken more broadly (*communiter*), to include words that have further significates *ex consequenti* or *per posterius*. It is in the latter sense that analogical terms (*analogia*) are said to be equivocal. For instance, *ens* is first said of substance, and afterwards (*per posterius*) of accidents, and *sanum* is first said of an animal, and afterwards (*ex consequenti*) of urine.<sup>97</sup> The text goes on to divide equivocation taken strictly into four kinds: 1. Equivocation by virtue of signification (e.g., *canis*); 2. equivocation by virtue of consignification (e.g., *episcopi*); 3. equivocation by virtue of office (e.g., syncategorematic terms); 4. equivocation by virtue of *transumptio*.<sup>98</sup>

Lambert of Auxerre, who also wrote around 1250, has more to say about analogy than did the *Summe Metenses*, but before I take up that issue, I shall say something briefly about his first and third modes of equivocation and about the place of transferred meaning.<sup>99</sup> The first mode arises when a word principally signifies more than one thing, as in the case of *canis*,

<sup>94</sup> Bacon, *Summulae* III, p. 243.

<sup>95</sup> Kilwardby does use the word *analogia* in his *Categories* commentary, but not in the new sense: Lewry, "Robert Kilwardby's Writings," p. 368, line 37, p. 374, lines 26, 33.

<sup>96</sup> S. Knuuttila, "Being qua Being in Thomas Aquinas and John Duns Scotus" in *The Logic of Being*, ed. S. Knuuttila and J. Hintikka, Synthese Historical Library (Texts and Studies in the History of Logic and Philosophy) 28 (Dordrecht, 1986), 205. For De Rijk's dating, see *Logica Modernorum*, vol. 2, pt. 1, pp. 451-52. For the redating, see references in E. Stump, "Logic in the Early Twelfth Century" in *Meaning and Inference in Medieval Philosophy: Studies in Memory of Jan Pinborg*, ed. N. Kretzmann (Dordrecht, Boston, London, 1988), 50 nn. 11 and 12. Knuuttila (215 n. 29) also cites Lyttkens, *Analogy*, 125, 159-62, in relation to early uses of the term "analogy," but Lyttkens's sources are the theological works of Alexander of Hales, Albert the Great, and Bonaventure, none of which is very early.

<sup>97</sup> *Summe Metenses*, p. 475.

<sup>98</sup> *Summe Metenses*, pp. 475-76.

<sup>99</sup> Lambert of Auxerre, *Logica*, pp. 149-52.

which can signify a four-legged animal, a marine animal, and a star. The third mode is said to arise on account of diverse consignification, and it includes both the *episcopi* case and the *laborans* case. Two things are interesting in Lambert's discussion. First, he uses the terminology of supposition theory to explain the variation of reference in the paralogism involving *laborans*; second, he argues that the *episcopi* case can be regarded both as one of equivocation and as one of amphiboly.<sup>100</sup> One can look at *episcopi* as signifying more than one case, but one can also consider it as embodying different propensities for construction (*aliam et aliam rationem construendi*).<sup>101</sup> As was the case with Peter of Spain, it is only in his account of the third type of amphiboly that Lambert emphasizes the effect of sentential context.<sup>102</sup> The second type of amphiboly is identified as involving transferred meaning (*transumptio*), but in relation to equivocation cases of transferred meaning are merely said to be reducible to the second mode.<sup>103</sup>

Turning now to analogy, I shall quote Lambert's own words: "The second species [of equivocation] arises because a word signifies one thing which is nonetheless predicated of more than one in such a way that it is [predicated] primarily of one and secondarily of another, or of others. That is why equivocation of this second sort occurs in analogical terms. An analogical term signifies one <thing> but under different concepts (*intentionibus*): that is, under the concept (*ratio*) of priority and posteriority in connection with those things of which it is predicated. For instance, *ens* signifies one <thing> but it is predicated primarily of substance, and secondarily of accident, which is why it is an analogical term."<sup>104</sup> Having given this as his initial account, Lambert goes on to explore the example of "healthy."<sup>105</sup> His handling of the example makes it clear that the "one

<sup>100</sup> Ibid., p. 152. For references to supposition theory in this context, see also Aegidius, *In SE*, fol. 10vb.

<sup>101</sup> On the notion of construction, see M. A. Covington, *Syntactic Theory in the High Middle Ages*, Cambridge Studies in Linguistics 39 (Cambridge, 1984), 32-35. Cf. Duns Scotus, *In SE*, p. 27b, where he states Question 19, "Utrum diversa ratio construendi requiratur ad Amphibologiam."

<sup>102</sup> Lambert of Auxerre, *Logica*, p. 153.

<sup>103</sup> Ibid., pp. 150-51.

<sup>104</sup> Ibid., p. 149: "Secunda species provenit ex eo quod aliqua dictio significat unum predicatum tamen a pluribus, ita quod ab uno per prius, ab alio sive aliis per posterius, unde secundum istam speciem equivocatio fit in terminis analogis. Terminus analogus unum significat sub diversis tamen intentionibus: hoc est, sub ratione prioris et posterioris in hiis a quibus predicatur, ut ens unum significat, sed prius est predicatum a substantia, per posterius ab accidente, unde est terminus analogus." Much of the translation is due to Norman Kretzmann.

<sup>105</sup> Ibid., p. 150.



thing" involved is health: "health is one and the same in all these," i.e., animal, urine, food, diet (*eadem est sanitas in omnibus hiis*), but the health is first in the animal as in a subject, whereas it is in the urine as in a sign. At the ontological level, one might say that the secondary objects involved (if one can speak of a diet as an object) are each related to a quality of the animal; at the conceptual level, one might say that a reference to health features in each concept involved ("healthy" as applied to urine, "healthy" as applied to food, and so on). The primary sense of "healthy" comes from its use to pick out a characteristic of animals, just as the primary sense of "being" comes from its use to pick out substances. The secondary sense of "healthy" comes from its use to pick out characteristics of things related to healthy animals, just as the secondary sense of "being" comes from its use to pick out things, namely accidents, related to substances. It is, however, worth noting that Lambert's language, like the language used later by Boethius of Dacia in his discussion of "healthy," makes it sound as if he really does want to say that the nature "health" is found in urine, food, etc. It is just that there are different senses of "in" involved.<sup>106</sup>

Another work which belongs in this section is of course the treatise *De fallaciis* which has been attributed to Aquinas himself.<sup>107</sup> This work presents an account of the three modes of equivocation which, for the most part, follows Peter of Spain, but with some important differences in its account of the second mode. The first two modes are said to involve signification, while the third mode involves consignification. Both the *sedens* and the *laborans* cases are used, while, as with Peter of Spain, the *episcopi* case is relegated to amphiboly.<sup>108</sup> In the discussion of mode two we find the following changes. First, the mode is described in terms of *transumptio*, and it is the case of *per prius et per posterius* signification which is reduced to *transumptio* rather than the reverse. Second, analogy is specifically mentioned: "The multiplicity of analogical names is reduced to this species <of equivocation>. <Analogical names> are those which are said *secundum prius et posterius*, as 'healthy' is said of an animal, of urine, and of diet."<sup>109</sup>

We must also consider Albert the Great, whose commentaries on Aristotle were written in the 1250s and 1260s. In his commentary on the *Categories* Albert discusses the notion of a term that has multiple signification "through

<sup>106</sup> Boethius of Dacia, *Opera: Modi Significandi sive Quaestiones super Priscianum Maiorem*, ed. J. Pinborg and H. Roos, *Corpus Philosophorum Danicorum Medii Aevi* 4.1 (Copenhagen, 1969), 127-28.

<sup>107</sup> The editors of the Leonine edition cast some doubt on this attribution, partly on the basis of the unusually frequent use of the word *nam*: introduction to *De fallaciis* in Thomas Aquinas, *Opera omnia*, vol. 43 (Rome, 1976), 386-87.

<sup>108</sup> *De fallaciis*, pp. 406, 407.

<sup>109</sup> *De fallaciis*, p. 406.

analogy or proportion to one <thing> which is signified principally in the name.”<sup>110</sup> The one nature picked out by one analysis (*ratio*) is said to be participated in unequally by virtue of some mode or way of being. Thus, the nature of health belongs to an animal, and other things are called healthy insofar as they are significative, conservative, or perfective of that health. What exists *per se* is called *ens* and *unum* in the primary sense, and other things are so called because they are referred to the subject by some mode of being (*aliquo modo entitatis referuntur*), either as a measure or as a disposition or as a relation (*sicut respectus*) or in some other way.<sup>111</sup> Later he said that this type of equivocation was nearest to univocation; and he also allowed it to include the case of similitude, as when a painted man and a real man are both called an animal.<sup>112</sup> In his commentary on the *Sophistici Elenchi*, he runs through the three modes of equivocation but does not discuss analogy. The first mode is when a word refers equally to more than one significate. He explains that *consignificatio* is included here and cites the *episcopi* case. He also explains that consignification was not at issue in the *Categories* account of equivocation, which was concerned not with deceptive arguments but with classification under the categories. The second mode is when one thing is picked out primarily (*principaliter*) and the other secondarily or as a consequent. The third mode is when a word has a new *modus significandi* by virtue of sentential context.<sup>113</sup>

It is after these authors, in the last thirty or so years of the century, that we find fuller discussions of analogy. One such discussion is in Roger Bacon’s *De signis*, dating from 1267, but I shall not describe it since it does not relate directly to the Aristotelian modes, and since it is unlikely to have had any influence on the other views I shall be discussing.<sup>114</sup>

## EQUIVOCATION AND ANALOGY BETWEEN 1270 AND 1300

### Analogy and Attribution in *Categories* Commentaries

I shall begin with a look at some earlier *Categories* commentaries. Peter of Auvergne and Anonymus Matritensis had very little to say, but they both employed the notion of attribution, as did Simon of Faversham in

<sup>110</sup> Albert the Great, *In Praed.*, p. 153a: “Et hic quidem modus vocatur multiplex dictum secundum analogiam, sive proportionem ad unum quod principaliter in nomine significatur.”

<sup>111</sup> *Ibid.*, pp. 152b–153a.

<sup>112</sup> *Ibid.*, p. 154a.

<sup>113</sup> Albert the Great, *In SE*, pp. 537a–539a.

<sup>114</sup> Maloney has described Bacon’s views in his paper, “Roger Bacon on equivocation,” though he took his material from the *Compendium of Theology* rather than from *De signis*.

his *Categories* commentary.<sup>115</sup> All three discussed the problem of whether a science had to have one subject, and they agreed that the subject need be one only through attribution. In divine science, all the things considered have attribution to God;<sup>116</sup> in the science of the categories all accidents are attributed to substance.<sup>117</sup> Peter of Auvergne and Anonymus Matritensis went on to use the notion of attribution in their brief accounts of analogy. They said that an analogical term such as *ens* signifies one thing primarily (*per prius*), in this case substance, and another thing secondarily (*per posterius*), in this case accident, and that the latter is signified through attribution to the former.<sup>118</sup>

A much longer account is found in the *Categories* commentary of Martin of Dacia who introduced a threefold division into equivocal, analogical, and univocal in his discussion of the question whether *ens* could serve as genus to the ten categories.<sup>119</sup> Central to his discussion is a distinction between *ratio* and *natura*: equivocal terms involve more than one analysis and more than one nature, univocal terms involve one analysis and a certain kind of distinction among natures, and analogical terms involve more than one analysis and a certain kind of unity among natures. Thus, he says, they occupy a middle position between simply equivocal terms and simply univocal terms. He explains the matter as follows. A simply univocal term refers to a number of things, to each of which it communicates its analysis (*ratio*) on an equal footing. The individuals share a name and an analysis. If we think of the individuals involved as having a nature, however, we see that the application of the analysis to one individual is not to be explained in terms of the nature had by another.<sup>120</sup> "Animal does not communicate itself to Socrates through the nature of Plato" (*animal non communicat se Socrati per naturam Platonis*). A simply equivocal term signifies more than one thing by virtue of diverse analyses and it communicates itself to

<sup>115</sup> For a discussion of the appearance of the word "attribution" in philosophical vocabulary after 1220 and its relation to Latin translations of Aristotle's *Metaphysics*, see Andrews, "Peter of Auvergne's Commentary on Aristotle's *Categories*" 1:15-16.

<sup>116</sup> Simon of Faversham, *In Praed.*, p. 74.

<sup>117</sup> Andrews, "Petrus de Alvernia," 10; idem, "Anonymus Matritensis," 124. Cf. John of Dacia, *Opera*, p. 51: "... vnitas proportionis seu analogie sufficit ad vnitatem scientie, et hoc est vnitas attributionis, quicumque sit ille modus attributionis."

<sup>118</sup> Andrews, "Petrus de Alvernia," 14-15; idem, "Anonymus Matritensis," 128. Peter of Auvergne also used the phrase *ex consequenti* (p. 10). John of Dacia made brief remarks to the same effect as these two authors, using *ens* and *sanum* as examples: John of Dacia, *Summa gramatica*, p. 370. He emphasized that more than one *ratio* was involved.

<sup>119</sup> Martin of Dacia, *In Praed.*, pp. 158-59. He used the phrase "analogum per attributionem" in *Quaestiones in librum Sex Principiorum* in *Opera*, p. 274.

<sup>120</sup> Cf. Aquinas, *I Sent.* 35.1.4 Solut.: "unum esse non est nisi in una re; unde habitus humanitatis non est secundum idem esse in duobus hominibus."

these things on an equal footing. That is, they all share a name, though not an analysis. If we consider the natures of the individuals involved, we see that the application of the name to one individual is not to be explained in terms of the nature had by another: “a barking thing is not called a dog through the nature of a celestial body” (*latrabilis non dicitur canis per naturam caelestis*). An analogical term, like an equivocal term, refers to a number of things by virtue of different analyses, but it communicates (what, is left unspecified) to these things on an unequal footing, by priority and posteriority. That is, if one considers the natures of the individuals which share a name though not an analysis, we see that the application of the name to one individual is indeed to be explained in terms of the nature had by another. Thus the word *ens* applies to an accident by virtue of the nature of substance. As a result, one use of the name has priority.

### The Three Modes of Equivocation

I shall now turn to commentaries on the *Sophistici Elenchi*. While there is no relevant material in the *Categories* commentary attributed to Aegidius Romanus, there is some in his commentary on the *Sophistici Elenchi*. He remarked that the second mode of equivocation occurred when one thing was signified principally and another as a consequent (*ex consequenti*), and that it involved analogical terms (“reperitur in analogis”). The third mode involved basically univocal terms with diverse *modi significandi*, as in the cases of *laborans* and *sedens*.<sup>121</sup> When we turn to commentaries on the *Sophistici Elenchi* by Incerti Auctores, Simon of Faversham, and Duns Scotus, however, we find a much more elaborate discussion of analogical terms. In order to place this discussion in its proper setting, I shall first consider what these authors had to say about the three modes of equivocation.

Incerti Auctores discuss the matter in the SF-commentary and in the C-commentary, but there is no significant difference between the two accounts.<sup>122</sup> The position adopted is a standard one. The first and second modes involve a plurality of significates, and these are equally represented in the first mode. In the second mode the significates are unequally represented, the secondary one being picked out either through attribution or through transference (*transumptio*). The third mode involves a plurality of *modi significandi*. Special attention was paid to *laborans*, which, they claimed, had its double temporal reference from imposition, and not from

<sup>121</sup> Aegidius, *In SE*, fol. 10ra-va.

<sup>122</sup> Incerti Auctores, *Quaestiones*, pp. 111-20 (SF-commentary); pp. 308-10, 317-23 (C-commentary). I follow the C-commentary most closely.

the effect of sentential context. The definition of the third mode in terms of the effect of conjoined terms was explicitly rejected.<sup>123</sup>

Simon of Faversham gave varying accounts of the three modes of equivocation. In Question 19 of his *Quaestiones veteres*<sup>124</sup> his categorization was that found in Incerti Auctores, but in Question 21 and in Question 10 of the *Quaestiones novae* he listed the modes as follows.<sup>125</sup> The first mode occurs when some word primarily and equally signifies or consignifies more than one thing, so that both *canis* and *episcopi* were included. The second occurs when a word signifies one thing properly through imposition and another improperly through transference (*transumptio*). The third occurs when a word signifies one thing primarily (*per prius*) and another thing secondarily (*per posterius*) but does so in each case by virtue of imposition. He gave *laborans* as his example, and he went on to argue that the double temporal reference of this word was not due to the effect of sentential context.<sup>126</sup> However, he did seem to think that imposition was linked to context in a way. *Laborans* is so imposed that in a certain sentential context it will signify past time, whereas it is imposed to signify the present when taken by itself. In this respect he thought that *laborans* was to be regarded as an analogical term.<sup>127</sup>

Finally, we come to Duns Scotus.<sup>128</sup> The account he gives is a largely standard one. The first mode is pure equivocation, under which he includes analogy, as we shall see below. He says that the second mode, since it results from what we are accustomed to say, must occur when a term is transferred (*translatio et transumptio*) from its proper signification to an improper signification on account of some similitude, and he cites the laughing fields.<sup>129</sup> The third mode is problematic because of the controversy over sentential context, and Duns Scotus devoted a Question to the issue.<sup>130</sup> He argued that since a term such as *laborans* had to have its absolute *modi significandi*,

<sup>123</sup> Incerti Auctores, *Quaestiones*, pp. 119, 320. In the latter place we read "tertius modus aequivocationis non provenit ex eo quod dictio unum consignificet per se et aliud ex adiuncto, sed ex eo quod dictio aliqua aequivoce repraesentat diversos modos significandi ex sua impositione." The *episcopi* case is not mentioned.

<sup>124</sup> Simon of Faversham, *In SE*, p. 80.

<sup>125</sup> *Ibid.*, pp. 85-86, 127-28.

<sup>126</sup> *Ibid.*, pp. 128-30; cf. p. 85.

<sup>127</sup> *Ibid.*, p. 84.

<sup>128</sup> There is a fairly useful paper dealing with his early views: see R. Prentice, "Univocity and Analogy according to Scotus's *Super libros Elenchorum Aristotelis*," *Archives d'histoire doctrinale et littéraire du moyen âge* 35 (1968): 39-64. Prentice, however, dismisses Scotus's commentary on the *Categories*, and he makes no attempt to place Scotus's views in their historical (and logical) setting.

<sup>129</sup> Duns Scotus, *In SE*, p. 23a.

<sup>130</sup> *Ibid.* Q.17, pp. 25a-27a.

including the consignification of time, before it entered a sentential context, the so-called third mode of equivocation as defined by Aristotle was not in fact common to equivocation and amphiboly, but belonged only to amphiboly.

### The Threefold Division of Analogy

I shall now consider the threefold division of analogy found in these authors, starting with Incerti Auctores. Once more, we find a discussion in both the SF-commentary and the C-commentary, with only minor differences between the two.<sup>131</sup> Analogical terms can be said to fall under the second mode of equivocation which arises when a term signifies two things, one primarily and the other either through attribution to the first or by virtue of transferred meaning. When one considers the matter more closely, however, it becomes evident that there are three different types of analogical terms, one univocal, one equivocal, and one falling in between. The first type occurs when there is one characteristic (*ratio*) participated in equally by things which are themselves unequal. This happens when two different species, of which one is more noble than the other, fall under the same genus. The genus term is applied first to the nobler species, because the nobler difference (that is, the positive one, such as "being rational" as opposed to "not being rational") comes first, but with respect to the one *ratio* of genus, the two species are equal participants. Analogical terms which are neither univocal nor equivocal occur when there is one common characteristic which is participated in unequally because it is found primarily (*per prius*) in one analogate, secondarily (*per posterius*) in the second analogate. *Ens* is cited as the example, and Incerti Auctores explain that according to Avicenna there must be a *ratio* of *ens* which is common to both substance and accident, because *ens* is what the human mind grasps before anything else.<sup>132</sup> Moreover, the notion of being has to be something

<sup>131</sup> Incerti Auctores, *Quaestiones*, pp. 129-34, esp. 133-34; and 310-17, esp. 315-17. I shall follow the latter account, which is more detailed.

<sup>132</sup> Avicenna Latinus, *Liber de Philosophia Prima, sive Scientia Divina I-IV: Edition critique de la traduction latine médiévale*, ed. S. Van Riet (Louvain and Leiden, 1977), Tract. I, chap. 5, esp. p. 40: "ens . . . est intentio in qua conveniunt secundum prius et posterius. . . ." For a discussion of this, see S. F. Brown, "Avicenna and the Unity of the Concept of Being: The Interpretations of Henry of Ghent, Duns Scotus, Gerard of Bologna and Peter Aureoli," *Franciscan Studies* 25 (1965): 117-50. Incerti Auctores, *Quaestiones*, p. 316, reads "ipsa ratio entitatis absolute videtur esse quoddam abstractum ab ente per se et ab ente in alio, illud enim quod determinat se ad unum oppositorum, nec ei repugnat aliquod eorum, videtur esse indeterminatum et commune utrique illorum."

absolute, and indifferent to both being *per se* and being in another. This is quite consistent with saying that substance is the first to participate in the characteristic of *ens*, and accident participates afterwards, by virtue of its relation to substance (*mediante substantia*). Analogical terms which are equivocal according to the second mode of equivocation occur when there is no common characteristic (*ratio communis*) but one thing is signified through attribution to another. Thus "healthy" primarily (*primo et simpliciter*) signifies a healthy animal, and it signifies urine, diet, and medicine through attribution to the first thing.

Like Incerti Auctores, Simon of Faversham gave a threefold division of analogical terms, but the details of his account are somewhat different with respect to the treatment of *ens*.<sup>133</sup> The first type of analogy, which is reducible to univocation, occurs when a genus term is applied to two unequal species. This type interests the metaphysician rather than the logician. The second type, which falls between equivocation and univocation, occurs when one analysis (*ratio*) is applied first to one thing and afterwards to another. His sole example is the word *perspicuum* applied to its superiors and to its inferiors, but unfortunately he gives no hint as to what these might be.<sup>134</sup> The third type, which is reducible to equivocation, occurs when there is one word said primarily of one thing and secondarily of another, but not according to one *ratio*. The example he gives is *ens* said of substance and accident. Contrary to Incerti Auctores, he argued that any *ratio essendi* had to be absolute or relational (*comparata*); and that an absolute *ratio* would apply only to substance, whereas a relational one would apply only to accidents. Hence, he said, there can be no *ratio communis* of *ens*.

Duns Scotus took up the threefold division of analogy both in his *Categories* commentary and in his commentary on the *Sophistici Elenchi*.<sup>135</sup> The first type occurs when a word primarily signifies one *ratio* which nevertheless belongs to different things in different ways, according to a certain ordering. He cited "cause," "end," and "principle" as examples. He also mentioned the case of genus and species,<sup>136</sup> but he suggested that while the species of a given genus might have an ordering among themselves in terms of more and less perfect, they did not participate in the genus according to that ordering. The variety of things called *finis* or *causa*, however, does exhibit participation according to a certain ordering. So far as the logician is concerned, the first type of analogy really involves univocal predication.

<sup>133</sup> Simon of Faversham, *In SE*, pp. 78, 123-24. I use the latter account since it is fuller.

<sup>134</sup> I haven't noticed other uses of this example.

<sup>135</sup> Duns Scotus, *In Praed.*, pp. 446a-447a; *In SE*, pp. 20a-25a.

<sup>136</sup> For some more discussion of Scotus on genus, see Marrone, "The Notion of Univocity," 379-83.

The second type of analogical term is said to occur when one thing is signified primarily and another thing is signified secondarily. The third type occurs when a word (*vox*) is imposed to signify one thing properly and it is transferred to signify another thing improperly on account of some similitude. This, he said, is the second mode of equivocation, and it turns out to have no bearing on the predication of such terms as *ens* and *sanum*.

The main thrust of Scotus's discussion was directed at the supposed second type of analogical term. Both in the *Categories* commentary and in the commentary on the *Sophistici Elenchi*, Scotus argues against the notion of signification *per prius et posterius* on the grounds that it involves a false claim about the relationship between the order of signifying, the order of understanding, and the order of things.<sup>137</sup> Even if things can exhibit ordering (and Scotus believed that they could) the originator of language need not pay attention to the order. One can impose a name on a posterior object without ever having been aware of the prior object; and one can also understand the prior object as prior while deciding not to impose a name on it. In either of these cases, the word imposed will primarily (*primo*) signify the posterior object; and the nature of imposition is such that that word with that imposition cannot be changed to have a *per posterius* signification.<sup>138</sup> In the *Sophistici Elenchi* commentary, Scotus carries the question further by paying attention to the number of impositions and hence of *rationes* involved. If there is only one act of imposition there will be only one *ratio*, and hence we will be dealing with a case of univocation. If there are two acts of imposition there will be two analyses, and these will have to represent the diverse objects equally, since the process of voluntary imposition does not allow for any ordering of distinct significations. He considered the view put forward by Incerti Auctores, to the effect that there is one *ratio* but that it is a common and hence indeterminate one which is then applied primarily to one object (substance in the case of *ens*) and secondarily to another. He rejected the very notion of a *ratio communis*, saying that any *ratio* must be determinate. He concluded that there is no room for analogical predication as a mean between univocal and equivocal predication. Those terms such as *ens* which are apparently predicated analogically are really equivocal. He later added that other terms, such as "healthy" turn out to be really univocal. This is because only one thing is primarily signified, namely the health which is in the animal as in a subject,

<sup>137</sup> Duns Scotus, *In Praed.*, pp. 446b-447a; *In SE*, pp. 20a-23b.

<sup>138</sup> Duns Scotus, *In Praed.*, pp. 446b-447a: "manifestum est, quod <vox> non significabitur per posterius illud cui primo imponitur. . . . Vox enim postquam imposita est, non mutatur in significando illud, cui imponitur." I have deleted a semicolon after *posterius*.



in urine as in a sign, and in diet as in a conserving agent.<sup>139</sup> At the same time, Scotus held that analogy was indeed possible among things. Things may genuinely be ordered among themselves; accidents do have attribution to substance; but the ordering and the notion of attribution cannot be captured in the signification of individual words.

#### AQUINAS ON ANALOGY

When one considers the accounts of analogy found in logicians from the second half of the thirteenth century, one can make the following comments. First, proportionality does not enter the picture any more than does similitude, whereas the notion of attribution is used with fair frequency.<sup>140</sup> Second, if one takes Boethius's four divisions of equivocation *a consilio*, one can see that the focus is solely on the last two, *ab uno* and *ad unum*; but the matter is complicated by the use of *ens* as an example. Third, the question whether one or more *rationes* or *intentiones* are involved in analogy does not receive a single answer. Fourth, the crucial central notion is that of *per prius* and *per posterius* signification; and *modi significandi* have no role in analogy as such. Finally, the ontological question of participation in a nature cannot be ignored, and the part played here by the genus case is important. I shall say something about each of these in turn, relating them to Aquinas's discussions of analogy; but the only text of which I shall offer detailed interpretation is the threefold division of analogy in his *Sentences* commentary.

So far as proportionality is concerned, little needs to be said. Cajetan is notorious for his claims that *analogia secundum intentionem et secundum esse* as described in the *Sentences* commentary is to be identified with the analogy of proportionality introduced in *De veritate*, and that furthermore this is the only true type of analogy.<sup>141</sup> Thirteenth-century logicians simply

<sup>139</sup> Duns Scotus, *In SE*, p. 24b. Cf. Lambert of Auxerre, and his views about "being in," discussed on pp. 113-14 above.

<sup>140</sup> One could perhaps see Aquinas as allowing for similitude in *I Sent.* 35.1.4 Solut.: "sed duplex est analogia. quaedam secundum convenientiam in aliquo uno, quod eis per prius et posterius convenit; et haec analogia non potest esse inter deum et creaturam, sicut nec univocatio. alia analogia est, secundum quod unum imitatur aliud quantum potest, nec perfecte ipsum assequitur; et haec analogia est creaturae ad deum." He mentions the painted man case in a discussion of equivocation: *In libros Physicorum* 7.8 n.947[8] (ed. Maggiolo). Cf. n. 85 above, for Peter of Spain.

<sup>141</sup> For ample discussion and references, see Lytkkens, *Analogy*; G. P. Klubertanz, *St. Thomas Aquinas on Analogy: A Textual Analysis and Systematic Synthesis* (Chicago, 1960); R. McInerny, *The Logic of Analogy: An Interpretation of St. Thomas* (The Hague, 1961); B. Montagnes, *La doctrine de l'analogie de l'être d'après Saint Thomas d'Aquin*, *Philosophes médiévaux* 6 (Louvain and Paris, 1963).

do not seem to be interested in proportionality; and this in turn suggests to me that it is a mistake to suppose that Aquinas is talking about proportionality, or the comparison of two proportions, except in those places where he says explicitly that that is what he is doing.

The introduction of *ens* as an analogical term complicated the Boethian classification in two ways. First, should *ens* be treated in the same way as *sanum* or not? Second, if it is to be treated differently, where does the difference lie? Lambert of Auxerre and Albert the Great treated the two cases in the same way, Incerti Auctores and Duns Scotus treated them differently, and other authors, such as Simon of Faversham leave the matter open, in that they do not choose to handle both examples. Aquinas himself makes an explicit distinction in his *Metaphysics* commentary, where he follows tradition in classifying “healthy” as a case of relationship to one <thing> as an end and “medical” as a case of relationship to one <thing> as an efficient principle, but he follows Averroes in introducing a third category for *ens*, that of relationship to one subject.<sup>142</sup> He had made the same distinction in his early work, *De principiis naturae*, where he had also used the notion of attribution.<sup>143</sup> Here he uses the common alternative, *per respectum ad unum*.<sup>144</sup> His frequently used division of analogy into two kinds, many-one and one-one,<sup>145</sup> does not seem to be related to the Boethian divisions or to discussions in the logic texts I have considered. Nor is it helpful in relation to possible distinctions between *ens* and *sanum*, given that *ens* is used to illustrate both cases in *De potentia*, *sanum* is used to illustrate both cases in the *Summa theologiae*, while *ens* is used to illustrate the one-one case and *sanum* to illustrate the many-one case in the *Summa contra gentiles*.<sup>146</sup> Indeed, I suspect that the purpose of this division into two types of analogy is simply to warn the reader against the danger of

<sup>142</sup> *In Met.* 4.1 nn.537-39 (ed. Cathala-Spiazzi); cf. Averroes, *Aristotelis Opera*, vol. 8, fol. 65va: “Et intendebat per hoc declarare, quod attributa ei, aut attribuuntur eidem fini, aut eidem agenti, aut eidem subiecto, sicut nouem praedicamenta substantiae.” See also Albert the Great, *Liber de Praedicabilibus*, p. 11b. De Libera (“Les sources,” 337-38) claims in effect that this is not a new division but is to be equated with the second division of chance equivocals, that involving proportion.

<sup>143</sup> *De principiis naturae* 6 in *Opera omnia* 43:46-47.

<sup>144</sup> For a discussion of this vocabulary in Aquinas, see Klubertanz, *St. Thomas Aquinas on Analogy*, 38-46.

<sup>145</sup> For this division, see *ST* 1.13.5 Solut.; *Summa contra gentiles* 1.34; *De potentia* 7.7 Solut.

<sup>146</sup> This variety of uses of *sanum* and *ens* seems to vitiate the arguments presented by Alain de Libera and Louis Millet in their (very different) attempts to explain Aquinas's distinction in terms of the *Summa contra gentiles* discussion alone: see De Libera, “Les sources,” 335; and L. Millet, “Analogie et participation chez saint Thomas d'Aquin,” *Les études philosophiques* (1989): 372-74.

believing that there are properties or natures which are in some sense external to both God and creatures, since the only common message seems to be that in religious language the one-one model has to be employed. We are told to look at the examples from the right perspective, but we are not told that there is some deeper reason for the division.

The question of whether one or more *rationes* or *intentiones* are involved in analogical predication was one to which various answers were given. In Albert the Great and in the early Aquinas the answer seems to be that there was just one, used in different ways; in Lambert of Auxerre and Martin of Dacia the answer seems to be that there were just two, used in very similar ways. In Incerti Auctores and Simon of Faversham the answer depends on which of the three types of analogy is considered: the first type involves one *ratio* used in one way, the second involves one *ratio* used in two ways, and the third involves distinct but similar *rationes*. Duns Scotus argued that no sense could be made of either of these last two cases.

The most important feature of this debate has to do, not with the arithmetic of *rationes*, but with the interpretation of signification *per prius et posterius*, as is easily seen from Aquinas's own handling of the issue. His approach to the question of the number of *rationes* varies. In the *Sentences* commentary's threefold division, he is quite clear that only one *intentio* is involved in each type, but in the first and last divisions that *intentio* is applied according to priority and posteriority.<sup>147</sup> In the same work he also claims that analogy involves just one *ratio*, but *ratio* here often seems to mean nature or characteristic.<sup>148</sup> In *De principiis naturae* a plurality of *rationes* is said to be involved.<sup>149</sup> In the *Summa theologiae* we are told that there is neither one *ratio*, as in the case of univocation, nor completely diverse *rationes*, as in the case of pure equivocation, but something in between.<sup>150</sup> Here, too, speaking according to priority and posteriority is involved.<sup>151</sup> In the commentary on the *Metaphysics* the same remarks are made, and we are told that the *rationes* are diverse with respect to the relationships involved but the same with respect to the one nature which is the focal point of these relationships.<sup>152</sup>

He has more to say, however, about the sense which can be attached to the phrase *per prius et posterius*. This was not a question asked by any

<sup>147</sup> *I Sent.* 19.5.2 ad 1. He does not use the actual phrase *per prius et posterius* of the third case.

<sup>148</sup> *I Sent.* 22.1.2 ad 3, 25.1.2 ad 5, 29.1.2b Solut.

<sup>149</sup> *De principiis naturae* 6, p. 46.

<sup>150</sup> *ST* 1.13.5 Solut.

<sup>151</sup> *ST* 1.13.6 Solut.

<sup>152</sup> *In Met.* 4.1 n.535; see also 11.3 n.2197.

of the logicians other than Duns Scotus and, much earlier, Peter of Spain. Peter had confined himself to drawing a distinction between the priority of a cause and the priority of a perfect nature. Health, he remarked, is said to be primarily in the animal and secondarily in the cause because the complete and perfect nature is found in the animal rather than in the causes of the animal's health.<sup>153</sup> Aquinas's own discussion is much more elaborate, and gives an advance answer to Duns Scotus's criticisms, which we looked at earlier. Aquinas draws a distinction between the orders of being, of knowledge and of imposition, both with respect to what a word is taken from and with respect to what a word is imposed in order to signify.<sup>154</sup> In the case of a healthy diet and a healthy animal the diet is first in the order of reality, but the animal is first in the order of knowledge and also first in terms of both aspects of imposition.<sup>155</sup> In the case of God, the situation is more complex. God is first in the order of reality, but posterior in the order of knowledge. So far as imposition is concerned, names for God are inevitably taken from what is first in the order of knowledge, i.e., the effects of God's activity. When one considers that which the name was imposed in order to signify, however, it looks as if Aquinas wants to draw a further distinction between the name "God" and names such as "good" and "just" which are intended to refer to absolute perfections. Aquinas is quite clear that the name "God," while taken from effects, is intended to signify the divine essence from the beginning,<sup>156</sup> but he also seems to say that names of perfections are first imposed by us on creatures<sup>157</sup> and yet that they are said primarily of God. He had claimed earlier that these names are more properly said of God and added, in what seems to be a corollary, that they are primarily said of him.<sup>158</sup> The thought seems to be that while we may at first intend to signify perfections as inhering in creatures, we may come to grasp that perfections are only perfect as they exist in God, and that creaturely perfections are mere reflections of God's nature. At this stage our perspective shifts, and we can truly say that the names of perfections are to be said first, i.e., properly and primarily, of God, whatever they were first taken from, and whatever they were first intended to signify in the temporal sense of "first."

Once sense has been attached to the notion of certain names being said first of God and afterwards of creatures, we can consider Aquinas's doctrines

<sup>153</sup> Peter of Spain, *Summule logicales*, p. 103.

<sup>154</sup> For a discussion of imposition, see the paper cited in n. 3 above.

<sup>155</sup> *SCG* 1.34.

<sup>156</sup> *ST* 1.13.8 Solut., 9 Solut.

<sup>157</sup> *ST* 1.13.6 Solut.

<sup>158</sup> *ST* 1.13.3 Solut.: "Quantum igitur ad id quod significant huiusmodi nomina, proprie competunt Deo, et magis proprie quam ipsis creaturis, et per prius dicuntur de eo."

of analogy and of religious language in more detail. While the distinction between the *res significata* or nature signified by a word and the word's *modi significandi* or grammatical features, including being abstract or concrete, is central to Aquinas's discussion of religious language, it has no role in Aquinas's explanation of such words as *ens* and *sanum*. Nor, given the discussions found in the logicians, would one expect it to. The way in which Aquinas, like the logicians, approaches ordinary analogical words is in terms of signification *per prius et posterius*. The case of religious language is complicated by the presence of creaturely *modi significandi*, but even when these have been transcended, negated, or in some way cancelled out, we are left with a *res significata* which is not genuinely common to God and creatures. In both the *Sentences* commentary and the *Summa theologiae* Aquinas emphasizes that the *res significata* is found primarily in God and secondarily in creatures.<sup>159</sup> It is significant that in his discussion Aquinas switches back and forth between speaking of the *res significata* or external nature as found *per prius* in God and of the relevant name as being said *per prius* of God,<sup>160</sup> for this makes clear the link between ontology and language.

This brings us to Cajetan's other notorious claim, made in relation to the threefold division of analogy in the *Sentences* commentary, namely that the supposed division between analogy of attribution and analogy of proper proportionality is based on the difference between intrinsic and extrinsic denomination. In the analogy of attribution, there is one nature found in just one of the analogates, whereas in the analogy of proper proportionality there is one nature found in different modes or degrees in the two analogates. Ralph McInerny has rejected this interpretation on the grounds that the classification in the *Sentences* commentary represents not a classification of types of analogy but a reflection on the fact that "the foundation of analogous names is not always the same."<sup>161</sup> He believes that the genus case does not give a type of analogical name at all, and that the other

<sup>159</sup> *I Sent.* 25.1.2 Solut.; *ST* 1.13.3 Solut., 1.13.6 Solut., 1.33.2 ad 4. Cf. *SCG* 1.34. The first passage reads "persona dicitur de deo et creaturis, non univoce nec aequivoce, sed secundum analogiam; et quantum ad rem significatam per prius est in deo quam in creaturis, sed quantum ad modum significandi est e converso, sicut est etiam de omnibus aliis nominis quae de deo et creaturis analogice dicuntur."

<sup>160</sup> "Nomen personae . . . dicitur . . . analogice" (*I Sent.* 25.1.2 ad 2); "hoc nomen persona quantum ad rem significatam, prius et verius est in deo quam in creaturis, unde est in illis analogice" (*I Sent.* 25.1.2. ad 3); "... quantum ad rem significatam per nomen, per prius dicuntur de Deo quam de creaturis: quia a Deo huiusmodi perfectiones in creaturas manant" (*ST* 1.13.6 Solut.); "nomina . . . per prius dicuntur de Deo . . . paternitas, per prius sit in Deo . . ." (*ST* 1.33.2 ad 4).

<sup>161</sup> McInerny, *The Logic of Analogy*, 122.

two divisions do not give two types of analogical name but merely show that "since an analogous name sometimes is found with one situation *secundum esse* and sometimes with another, the *secundum esse* situations are accidental to what is meant by analogous name."<sup>162</sup> In the light of my reading of thirteenth-century logicians, I want to make two comments. On the one hand, it is indeed wrong to see the issue as posed in terms of extrinsic and intrinsic denomination, since the texts simply do not use that vocabulary. Some authors such as Lambert of Auxerre even tended to talk as if the nature "health" is somehow in urine, diet, and medicine, and there seems to have been no great concern to clarify the matter. Aquinas himself is very nuanced on the subject. He certainly denies that the nature of health is in medicine or in urine,<sup>163</sup> and he also speaks in terms of a situation involving a common nature,<sup>164</sup> but so far as goodness, truth, and other perfections are concerned, he wants to say that in a sense they are truly only in God but that creatures participate in them in such a way that they also characterize creatures. There is a likeness such that "good and the like are predicated in common of God and creatures."<sup>165</sup> Everything other than God is called good by virtue of a similitude of the divine goodness which is at one and the same time inherent in the creature as a similitude and as a formal property of the creature.<sup>166</sup>

On the other hand, the way the threefold division of analogy is approached by Incerti Auctores, Simon of Faversham, and Duns Scotus, and also the way in which multiple divisions were handled by Roger Bacon in *De signis*, shows that an ontologically based division of some sort really was being put forward.<sup>167</sup> These authors were clearly interested in natures; they all believed that the case of genus had to be accommodated; and they all thought in terms of a hierarchy of analogical names related to types of participation (even if Duns Scotus believed that such a hierarchy could not be justified). The genus case gives us the sort of analogy that is most like, perhaps even identical to, univocation since it involves the equal participation of unequals in one *ratio*; the third case gives us the sort of analogy that is identical to deliberate equivocation, since participation in two linked *rationes* is

<sup>162</sup> McInerny, "The Analogy of Names is a Logical Doctrine" in *Being and Predication: Thomistic Interpretations* (Washington, 1986), 280-81.

<sup>163</sup> *ST* 1.16.6 Solut.

<sup>164</sup> *I Sent.* 19.5.2 ad 1.

<sup>165</sup> *De potentia* 7.7 ad 6. Cf. 7.7 ad 2; *SCG* 1.29; *ST* 1.4.3 Solut.

<sup>166</sup> *ST* 1.6.4 Solut.: "Nihilominus tamen unumquodque dicitur bonum similitudine divinae bonitatis sibi inhaerente, quae est formaliter sua bonitas denominans ipsum. Et sic est bonitas una omnium; et etiam multae bonitates." Cf. *De veritate* 21.4 Solut.

<sup>167</sup> In *De signis*, pp. 94-95, Bacon founded his divisions on agreement and diversity between natures and on agreement and diversity in relations between them.

involved; and the second case gives us the sort of analogy that falls between univocation and equivocation, since unequal participation in one *ratio* is involved. Where Cajetan went wrong was not in focusing on ontology but in his gratuitous introduction of the analogy of proportionality.

Aquinas's divisions are not precisely those of the logicians, but they can certainly be read in the light of what the logicians had to say. I shall first quote the passage, and then I shall summarize what it seems to say:

... something can be said according to analogy in three ways. Either <1> according to intention alone and not according to *esse*. This is when one intention is referred to several things according to prior and posterior [*per prius et posterius*], which however does not have *esse* except in one. Thus the intention of health is referred to <an> animal, urine, and diet in diverse ways, according to prior and posterior; not however according to diverse *esse* because there is no *esse* of health except in an animal. Or <2> according to *esse* and not according to intention, and this happens when many things are made equal in the intention of some common <nature>, but this common <nature> does not have the *esse* of one characteristic [*ratio*] in all. Thus all bodies are made equal in the intention of corporeity, whence the logician, who considers intentions alone, says, "this name 'body' is predicated univocally of all bodies"; but the *esse* of this nature does not have the same characteristic in corruptible and incorruptible bodies, whence for the metaphysician and natural <philosopher> who consider things according to their *esse*, neither this name "body" nor any other is said univocally of corruptibles and incorruptibles, as appears in *Metaphysics* 10 from <the words of both> the Philosopher and the Commentator. Or <3> according to intention and according to *esse*; and this is when they are neither made equal in a common intention nor in *esse*. In this way *ens* is said of substance and accident; and in these cases, it is necessary that the common nature should have some *esse* in each one of those of which it is said, but differing according to the characteristic of greater or lesser perfection. Similarly I say that truth and goodness and all of this sort are said analogically of God and creatures. Whence it is necessary that according to their *esse* all these should be in God and in creatures according to the characteristic of greater and lesser perfection; from which it follows that, since they cannot be according to one *esse* on both sides, they are diverse truths.<sup>168</sup>

<sup>168</sup> "... aliquid dicitur secundum analogiam tripliciter: vel secundum intentionem tantum, et non secundum esse; et hoc est quando una intentio refertur ad plura per prius et posterius, quae tamen non habet esse nisi in uno; sicut intentio sanitatis refertur ad animal, urinam, et dietam diversimode, secundum prius et posterius; non tamen secundum diversum esse, quia esse sanitatis non est nisi in animali. Vel secundum esse et non secundum intentionem; et hoc contingit quando plura parificantur in intentione alicujus communis, sed illud commune non habet esse unius rationis in omnibus, sicut omnia corpora parificantur in intentione corporeitatis. Unde logicus, qui considerat intentiones tantum, dicit, hoc nomen corpus de omnibus corporibus univoce praedicari: sed esse hujus naturae non est ejusdem rationis in

On my reading, Aquinas says here that analogical predication, and the analogical realities which it is intended to capture, depends on natures being shared in prior and posterior ways. When we focus on words, we focus on the one *intentio* corresponding to each word. When we focus on natures, we focus on their *esse* or being. If neither *intentio* nor *esse* can be regarded in terms of *per prius et posterius*, presumably we get pure univocation. If there is more than one *intentio* (and hence more than one *esse*) involved, presumably we get pure equivocation. This leaves three cases, which I shall not take in Aquinas's order. Case one is the genus case. Here the nature exists diversely because it is realized diversely in different species, but the *intentio* does not vary. Given the basic definition of "body," a corruptible body is as properly called a body as is an incorruptible one.<sup>169</sup> Case two is illustrated by the case of health. Here the nature does not have diverse types of existence because in fact it exists in only one analogate. The *intentio* however is used diversely: it applies in a prior sense to the animal, in a posterior sense to medicine, urine, and diet. In the third case both the nature and the *intentio* show gradations: the nature exists in a primary way in one thing, and the intention applies in a primary way to that thing. However, a further distinction has to be made at this point. Created substances and created accidents are related to their own *esse* in a similar way, whereas there is no similarity between the ways in which God and creatures are so related. Hence, the way in which "true" is said of God and creatures cannot be quite like the way in which *ens* is said of substance and accident, and this for a reason which goes beyond, and which founds, the differences in *modi significandi*.<sup>170</sup> Thus we get a double tension in Aquinas. First, there is a tension between the theory of analogy as it applies at the level of creation to *ens*, said of substance and accidents, and the theory of analogy

corporibus corruptibilibus et incorruptibilibus. Unde quantum ad metaphysicum et naturalem, qui considerant res secundum suum esse, nec hoc nomen corpus nec aliquid aliud dicitur univoce de corruptibilibus et incorruptibilibus, ut patet, 10 metaphys., ex philosopho et commentatore. Vel secundum intentionem et secundum esse; et hoc est quando neque parificatur in intentione communi, neque in esse; sicut ens dicitur de substantia et accidente; et de talibus oportet quod natura communis habeat aliquod esse in unoquoque eorum de quibus dicitur, sed differens secundum rationem majoris vel minoris perfectionis. Et similiter dico, quod veritas, et bonitas, et omnia hujusmodi dicuntur analogice de deo et creaturis. Unde oportet quod secundum suum esse omnia haec in deo sint, et in creaturis secundum rationem majoris perfectionis et minoris; ex quo sequitur, cum non possint esse secundum unum esse utrobique, quod sint diversae veritates" (*I Sent.* 19.5.2 ad 1).

<sup>169</sup> Cf. *In Phys.* 7.8 n.947[8] (ed. Maggiolo).

<sup>170</sup> God is his own *esse* but in creatures there is a distinction between *esse* and *essentia*. Univocity involves a sameness of nature which is compatible with those differences in *esse* which hold even between two creatures of the same type, but since God's *esse* is God's *essentia*, the difference between God's *esse* and a creature's *esse* carries with it a difference in any nature attributed to each (*I Sent.* 35.1.4 Solut.; *De veritate* 2.11 Solut.).



as it applies hierarchically, to words said both of God and of creatures. Second, there is a tension between Aquinas's insistence that God is utterly simple, and hence not to be compared to creatures, and his reliance on principles of similarity and participation in his proofs for God's existence and his account of created reality. Indeed, one can argue that the first tension arises from the second, since the type of analogy based on the notion of unequal participation in a common nature can capture only part of what Aquinas wants to say about God and creatures.<sup>171</sup>

### CONCLUSION

In this paper, I have attempted to show that Aquinas's theory of analogy is related to and illuminated by the work of thirteenth-century logicians. In a later paper I hope to show that Cajetan, and the immediate predecessors against whom he was arguing, should be read in the light of a long development which includes not just Aquinas but the logicians of the thirteenth and fourteenth centuries. We must never forget that medieval theologians were trained in logic, even if it remains true that the study of logic alone will never tell us the whole story.<sup>172</sup>

### APPENDIX I

#### Conjunction, Disjunction, and the *Ratio Communis*

The majority of the later authors I am concerned with raised the question of whether equivocal terms signified conjunctively or disjunctively. In the mid-thirteenth century there had been general agreement that equivocal terms signified conjunctively;<sup>173</sup> and Albert the Great held that view in a modified form. Equivocal terms signify more than one thing as if conjoined ("ut copulata") but not as a formally constituted conjunction ("non ratione formalis copulationis").<sup>174</sup> Aegidius Romanus

<sup>171</sup> I do not think that an appeal to the analogy of proper proportionality helps with this problem, but I shall not argue the point here.

<sup>172</sup> I would like to thank Sten Ebbesen, Irène Rosier, Eleonore Stump, and two anonymous referees for their helpful comments, and Norman Kretzmann for his constant help and encouragement. I would also like to thank the Canada Council for the Killam Research Fellowship which gave me time to do the research for this paper.

<sup>173</sup> S. Ebbesen, "Is 'canis currit' Ungrammatical? Grammar in Elenchi Commentaries," *Historiographia Linguistica* 7 (1980): 57, text on 62-63; idem, "Can Equivocation Be Eliminated?" *Studia Mediewistyczne* 18 (1977): 105, texts on 111.

<sup>174</sup> Albert the Great, *In SE*, p. 541a.

argued that both the conjunctive and disjunctive interpretations had to be straightforwardly false, but that sense could be made of them if one thought of an equivocal term as having its significates as it were conjoined in imposition and as it were disjoined in actual use.<sup>175</sup> Like other authors, he presented a more or less standard group of arguments against the conjunctive and disjunctive interpretations as normally taken.<sup>176</sup> If an equivocal term signified disjunctively, then no distinguishing between senses would be necessary, because the sentence containing such a term would have a unitary signification, and a sentence with three senses could turn out to be true in cases where it has at least two false senses. Thus "A dog shines" would be interpreted as "Either a barking thing or a dog fish or a celestial body shines," and the predicate would be verifiable of the last component of the disjunctive subject. If an equivocal term signified conjunctively, again no distinguishing between senses would be necessary because the sentence containing such a term would have a unitary signification, and the sentence would turn out to be false in cases where it has at least one true sense. Thus in "A barking dog and a dog fish and a celestial body shine" the predicate would not be verifiable of the first two components of the conjunctive subject. Incerti Auctores (C-commentary) added that since the imposition of names was temporally prior to the imposition of other parts of speech, *canis* had to have received its imposition before conjunction entered the picture.<sup>177</sup> None of the texts makes explicit mention of analogical terms. Here the disjunctive view seems to have been adopted, if Peter Aureoli's remarks of 1316 are a sure guide.<sup>178</sup> He wrote that the common metaphysical view was that "the concept of being . . . expresses in a prior way the *ratio* of substance and expresses the other *rationes* by attribution; and it expresses each under its own proper *ratio*, not under some common *ratio* in which they agree. It is nonetheless a disjunctive concept, not a copulative concept. Wherefore, when we speak of something as a being, we immediately conceive it as a substance or a quality or a quantity, we do not conceive some common *ratio*." The common *ratio* which Peter Aureoli rejects sounds like the indeterminate *ratio communis* against which Duns Scotus argued in his commentary on *Sophistici Elenchi*. The positive view described by Peter Aureoli

<sup>175</sup> Aegidius, *In SE*, fol. 11ra-va.

<sup>176</sup> Albert the Great, *In SE*, pp. 539b-540a; Martin of Dacia, *In Praed.*, pp. 164-65; John of Dacia, *Summa gramatica*, pp. 366-69; Incerti Auctores, *Quaestiones*, pp. 88-89, 94-95, 288-94; Simon of Faversham, *In SE*, pp. 66-69; Duns Scotus, *In SE*, pp. 11a-13b.

<sup>177</sup> Incerti Auctores, *Quaestiones*, p. 291. Cf. Simon of Faversham, *In SE*, p. 68; Duns Scotus, *In SE*, p. 13a. Priscian had argued that the noun had priority over other parts of speech: see *Institutionum grammaticarum libri XVIII* 17.12-21 in *Grammatici Latini*, ed. H. Keil, 8 vols. (Leipzig, 1855-80; rpt. Hildesheim and New York, 1981), 3:115-21. Such remarks reinforce the impression of a very rigid approach to signification. Any argument to the effect that the signification of names is dependent on or interdependent with the functioning of syncategorematic terms is ruled out. Duns Scotus did allow for a certain kind of conjunction, that between *actus significandi* rather than between *res significatae*: *In SE*, p. 13b.

<sup>178</sup> Quoted by Knuuttila, "Being qua Being," 207.

is more like the view that Knuuttila attributes to Aquinas, whereby there is a *ratio communis* which is “a disjunctive totality of the analogous meanings, signified by the analogous word in those cases where it is indifferent which of the analogates the word refers to.”<sup>179</sup> This view seems incompatible with what was said about the question of disjunctive signification. Nor is it firmly supported by the texts of Aquinas himself. In his commentary on *De interpretatione*, he speaks of participation in a common *ratio* which is divided, but the passage is not explicit enough to make it clear that a full-fledged disjunctive view is being promulgated.<sup>180</sup> In a similar passage in *De malo* he speaks once more of the division of a common analogical term, this time specifying that it is divided into those things of which it is said according to priority and posteriority, but nothing is said about disjunction.<sup>181</sup> It has to be noted that the whole question of his use of *ratio communis* is a complicated one, which I cannot explore here. However, in a lengthy study McInerny concludes that “The *ratio communis* of the analogous name is not obtained by picking out the minimal content of all the meanings of the name, but is rather the most proper meaning of the term in question, a meaning which is not properly saved by all the things to which it is considered to be common.”<sup>182</sup> If McInerny is right, the *ratio communis* is neither indeterminate nor disjunctive.

## APPENDIX 2

### What Is One *Nomen*?

The definition of “equivocal” requires that one *nomen* have more than one signification;<sup>183</sup> yet the linguistic unit with which a *nomen* is most readily identified is the *dictio*, which is apparently constituted by its having just one signification. On this account, the very possibility of an equivocal name seems to be ruled out; which is absurd.<sup>184</sup> Thus thirteenth-century logicians were faced with two related problems: first, the acceptability of the proposed definition of the *dictio* in terms of its having one signification; and second, the identification of the *nomen* with the *dictio*.

<sup>179</sup> Ibid., 206.

<sup>180</sup> *Expositio libri Peryermenias* 1.8 (Leonine edition, p. 40, lines 53-72).

<sup>181</sup> *De malo* 7.1 ad 1.

<sup>182</sup> R. McInerny, “The ‘Ratio Communis’ of the Analogous Name” in *Studies in Analogy* (The Hague, 1968), 63.

<sup>183</sup> Since *nomen* in the context of the discussion of equivocation covers any kind of word, references to signification should be extended to include references to consignification; otherwise syncategorematic terms will be excluded. Cf. the quotation from Bacon in n. 187 below.

<sup>184</sup> Kilwardby (Lewry, “Robert Kilwardby’s Writings,” 373): “Item, cum significacio dictionis sit perfectio eius, si unius dictionis sint plures significaciones, apparet unius esse plures perfecciones. Ex iam dictis igitur apparet nullum nomen esse equiuocum.”

To approach these problems, we need to consider the technical vocabulary involved. First, there is the *vox*, the spoken sound, simple utterance or perhaps word-form. Second, there is the *dictio*, or word proper. Third, there is the *pars orationis*, or part of speech. The *vox* itself was a certain kind of sound,<sup>185</sup> constituted, at least for some, by the single mode of utterance.<sup>186</sup> It could lack signification, or it could enjoy natural signification (e.g., a groan, a dog's barking), but what made a *vox* a *dictio* or word in the full sense was its endowment with conventional signification. The problem then was to describe this component of signification in such a way as to allow for both unity (with respect to the name) and diversity (with respect to multiple signification). A common claim, made only to be attacked, was that signification is the perfection of the *dictio*, that is, signification is the formal element which constitutes the *dictio* as one thing. Both Lambert of Auxerre and Bacon replied that the perfection of a *dictio* was in fact its *prolatio* or utterance, so that signification was accidental, and, as such, could vary in relation to one and the same *dictio*.<sup>187</sup> In opposition, Simon of Faversham struggled to express the thought that while signification was indeed essential to a *dictio*, it was also in some sense variable, so that the one *nomen* involved in equivocation need not be identified with a single *dictio*. He drew a distinction between signification in general and the determinate signification of one thing or another.<sup>188</sup> The former is essential, the latter is not, and so *canis* is one *vox* but multiple *dictiones* (*dictiones plures*). Other authors suggest that what makes a *dictio* a *dictio* is its capacity

<sup>185</sup> For a survey of ways of expressing this definition, see Bacon, *Summulae* I, pp. 221-22.

<sup>186</sup> Incerti Auctores, *Quaestiones*, p. 285; Simon of Faversham, *In SE*, p. 61: "vox aequivoca est vox una quia habet unum modum proferendi." Aegidius, *In SE*, fols. 10vb-11ra, argued that a *vox* was essentially significative, at least in the sense that it signified itself as conceived in the imagination. This imaginative conception necessarily preceded utterance and was what distinguished a genuine *vox* from a cough. *Ad placitum* signification was not, however, essential to a *vox*.

<sup>187</sup> Bacon, *Summulae* III, p. 240: "Perfectio enim substantialis dictionis est modus pronuntiandi sive ipsa pronuntiatio. Perfectio autem accidentalis est significatio et consignificatio." Lambert of Auxerre, *Logica*, p. 149: "Similiter dictionis una est prima perfectio, scilicet eius prolatio, plures tamen perfectiones secundarie possunt esse, id est significationes." Cf. Albert the Great, *In SE*, p. 539a: "Prima <perfectio> est dictionis substantialis: et haec est continua syllabarum et litterarum in dicendo prolatio. . . ."

<sup>188</sup> Simon of Faversham, *In SE*, p. 59. Albert the Great may have had something similar in mind when he argued, "Quia tamen quilibet instituens signum ad actum refert significandi, quamvis non referat ad hoc quod idem significet, et nomen est vox ad actum significandi relata . . ." (*In Praed.*, p. 154a). He added (pp. 154b-155a) that the same form, the act of signifying, remains in an equivocal term. However, he also said, "solum nomen secundum quod consistit in sono litterarum et syllabarum et accentu est commune . . ." (p. 152a). Kilwardby had earlier drawn a distinction between three kinds of *significatio*, and he argued that it was only the *actus et forma significantis* rather than the *significatum* or the relationship of the sign to the *significatum* that constituted the perfection of the *dictio*. Thus a *nomen* could be one by virtue of its one actuality, while having many *significata* or relationships to *significata* (Lewry, "Robert Kilwardby's Writings," 373).

for signifying, or *ratio significandi*.<sup>189</sup> Martin of Dacia argued that a *dictio* was constituted from a *vox* through the addition of a *ratio significandi*. The further addition of a *modus significandi* constituted the *dictio* as a part of speech and hence, as a *nomen*. He then made a distinction between two kinds of name, each with its own arithmetic. An equivocal name is, as a name, numerically plural, but as an equivocal name, it is numerically one. He explained that the *modi significandi* which constitute a name are drawn from the things signified, and these are a plurality, but the *modi significandi* which constitute an equivocal name are drawn from the signifying *vox*, which is one.<sup>190</sup> The status of the *dictio* as such did not attract his attention here. John of Dacia gave much the same arguments about the distinction between name and equivocal name, but he stated explicitly that more than one *dictio* was involved.<sup>191</sup> Peter of Auvergne, in a very brief discussion, agreed that an equivocal term was a multiple *dictio* ("Dicitur autem dictio plures") since it had several characteristics of signifying (*rationes significandi*), but he claimed that it was a single part of speech since it had just one essential mode of signifying.<sup>192</sup> He then argued that there was just one *nomen*, either because "nomen" referred to a *vox*, or because there was just one mode of signifying involved.<sup>193</sup> The reasons for the latter position are spelled out by Simon of Faversham, who used a distinction between active and passive modes of signifying which were defined as belonging respectively to the word and to the thing signified. In the case of a word such as *canis* there are three different *res significata* involved, each with its own set of passive modes, but these three sets of passive modes correspond to just one set of active modes (e.g., being singular, being nominative, being masculine).<sup>194</sup> Thus *canis* is just one part of speech and one *nomen*.<sup>195</sup> Of course, *amor* is a different case because here there really are two distinct parts of speech (noun and verb).<sup>196</sup> In order to argue that *canis* is a multiple *dictio* and a single *nomen*, a different view of the relation between *vox*, *dictio*, and *pars orationis* had to be adopted. Martin of Dacia saw a linear progression from *vox* through *dictio* to *pars*, but

<sup>189</sup> E.g., Incerti Auctores, *Quaestiones*, p. 122; John of Dacia, *Summa gramatica*, p. 374: "Sed dictio est dictio per rationem significandi." Aquinas uses the notion of *ratio significandi* in his *Sentences* commentary: see, e.g., *1 Sent.* 18.1.2 ad 4, 22.1.3 ad 2.

<sup>190</sup> Martin of Dacia, *In Praed.*, p. 163; Incerti Auctores, *Quaestiones*, pp. 91-93.

<sup>191</sup> John of Dacia, *Summa gramatica*, pp. 372-77, esp. 374.

<sup>192</sup> Andrews, "Petrus de Alvernia," 13.

<sup>193</sup> *Ibid.*, 16-17.

<sup>194</sup> Simon of Faversham, *In SE*, pp. 61-62. Incerti Auctores used the same arguments, but only to establish that an equivocal name was one part of speech: Incerti Auctores, *Quaestiones*, pp. 122-23. They had already argued (see n. 190 above) that one equivocal name was, qua name, numerically plural.

<sup>195</sup> As a result, one should indeed say "Canis currit" rather than "Canis currunt": Simon of Faversham, *In SE*, pp. 117-18; cf. Incerti Auctores, *Quaestiones*, pp. 296-98. For a discussion of this problem, see Ebbesen, "Is 'canis currit' Ungrammatical?" 53-68.

<sup>196</sup> Incerti Auctores, *Quaestiones*, p. 125; Simon of Faversham, *In SE*, p. 63. He explained that *amor* is one *pars* only with respect to its matter (the *vox*) and not with respect to form.

Simon of Faversham saw one *vox* becoming either a *dictio*, through its *ratio significandi*, or a *pars*, through its *modi significandi*. *Dictio* and *pars* are different aspects of one thing, the *vox*.<sup>197</sup> He added that whether one *nomen* corresponds to one *dictio* or not depends on which aspect we focus on. If we think of a *nomen* as a *vox* with determinate signification, then one *nomen* must be one *dictio*, but we need not approach matters in this way.<sup>198</sup> In Duns Scotus we find an intermediate position. An equivocal name is not a plurality (*nomina plura*) because there is only one *vox* involved. On the other hand, it is not simply one name, since it has several characteristics of signifying. It should be called a multiple name (*nomen multiplex*) just as *amor* should be called a multiple part of speech (*pars multiplex*). He added that a name was an artificial entity and as such was constituted by matter (i.e., the *vox*), not form. This made it capable of receiving more than one characteristic of signifying while retaining a kind of unity.<sup>199</sup> Yet another view is found in Radulphus Brito. He argued that the only common element in an equivocal term is the *vox* and hence that it cannot even be called one part of speech, since a common *modus significandi* is ruled out by the definition. Questions about the grammatical status of a word such as *canis*, like questions about the truth-value of sentences containing it, can be raised only after it has been decided which of the possible significates is involved.<sup>200</sup>

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<sup>197</sup> Simon of Faversham, *In SE*, p. 61.

<sup>198</sup> *Ibid.*, pp. 62-63.

<sup>199</sup> Duns Scotus, *In SE*, pp. 10a-11a.

<sup>200</sup> Brito, Commentary on the *Sophistici Elenchi*, quoted by Ebbesen in "Is 'canis currit' Ungrammatical?" 65-66.

## GILES OF ROME ON NATURAL MOTION IN THE VOID\*

Cecilia Trifogli

IN his treatment of the void, Aristotle formulates a well-known argument against the possibility of natural motion in the void.<sup>1</sup> The argument states that natural motion in the void is impossible since such motion would take no time.<sup>2</sup> Much discussed by both Greek and medieval commentators, this argument has often been viewed by historians of science as a consequence of those mistaken laws of Aristotelian dynamics which were to be replaced by the sound ones of Galileo's dynamics.<sup>3</sup>

Giles of Rome's discussion of this argument is contained in two groups of questions within his commentary on *Physics* 4.<sup>4</sup> Agreeing with Aristotle's and Averroes's opinion, Giles maintains that if a natural motion in the void occurred, it would take no time. Modern scholars have not fully analyzed Giles's position when considering the debate about natural motion in the void; moreover, in some cases, they have too quickly dismissed his views

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<sup>1</sup> Aristotle, *Physica* 4.6-9 (213a12-217b28), ed. W. D. Ross (Oxford, 1950; rpt. 1973).

<sup>2</sup> Ibid. 4.8 (215a24-216a11).

<sup>3</sup> See, for instance, I. E. Drabkin, "Notes on the Laws of Motion in Aristotle," *American Journal of Philology* 59 (1938): 60-84, esp. 66-70.

<sup>4</sup> Aegidius Romanus, *Commentaria in octo libros Physicorum Aristotelis* (Venice, 1502; rpt. Frankfurt, 1968), 4.13, fols. 90vb-91vb; 14, fol. 92rb; 16, fol. 95rb-va; 27, fols. 111ra-112ra.

The first group of questions (fols. 90vb-91vb, 92rb, 95rb-va) is contained in the commentary on Aristotle's treatment of the void; the second group (fols. 111ra-112ra) is contained in the commentary on Aristotle's treatment of time. The two groups of questions constitute the most systematic treatment of natural motion in the void. For references to this topic in Giles's other works, see Aegidius Romanus, *In primum librum Sententiarum* d.37 p.2 princ.2 q.3 (Venice, 1521), fols. 197vbP-198vbP; *Quaestiones de motu angelorum* qq. 1, 7, ed. G. Bruni, *Analecta Augustiniana* 17 (Rome, 1939-40), 28, 51-52; *In secundum librum Sententiarum* pars 1 d.14 q.1 art.3 (Venice, 1581; rpt. Frankfurt, 1968), 595aA-bD; *Quodlibeta* 7.4 (Louvain, 1646), 378a-380a; *Quaestio de materia caeli* (Venice, 1500; rpt. Frankfurt, 1982), fol. 86ra; *Theoremata de corpore Christi* prop.31 (Rome, 1554), fols. 19rb-20va.

as simply a misunderstanding of Thomas Aquinas's position,<sup>5</sup> or they have regarded the Aegidian discussion as an oddity on account of the unusual notion of nontemporal motion that it proposes.<sup>6</sup> Certainly, Giles's position does not contribute to the development of Aristotelian dynamics in the pre-Galilean age. Nevertheless, it is not for this reason devoid of philosophical value. As an analysis of notions crucially involved in the famous Aristotelian argument, i.e., natural motion and nontemporal motion, Giles's discussion is interesting doctrinally. Moreover, his position on natural motion in the void achieved an originality which was important for the Aristotelian theory of continuity.

In this paper I hope to substantiate this claim through an analysis of the two main parts into which Giles's discussion of natural motion in the void is divided: (1) the arguments in favor of Aristotle's conclusion that natural motion in the void would be nontemporal in character; (2) the defense of this conclusion against the objections raised by a famous argument: the so-called *distantia terminorum* argument.

I shall begin, however, with a brief exposition of Aristotle's treatment of natural motion in the void and its reception by Greek commentators and Averroes.

#### THE ARISTOTELIAN CONTEXT AND AVERROES'S INTERPRETATION

Most of Aristotle's discussion of the void concerns the relationship between the void and local motion. After all, Aristotle says, the existence of the void has been postulated as a necessary condition for the existence of local motion: an empty space in which bodies can move.<sup>7</sup> Aristotle strongly rejects this assumption. First he proves that the void is not necessary for the existence of local motion. Bodies can also move from one place to another in a material *plenum* without violating the principle of the

<sup>5</sup> This opinion is supported by P. Duhem, *Le Système du Monde: Histoire des doctrines cosmologiques de Platon à Copernic* (Paris, 1913-59), 8:20-22.

<sup>6</sup> See E. Grant, *Much Ado about Nothing: Theories of Space and Vacuum from the Middle Ages to the Scientific Revolution* (Cambridge, 1981), 36. For other brief or partial expositions of Giles's position, see E. A. Moody, "Ockham and Aegidius of Rome" in *Studies in Medieval Philosophy, Science, and Logic: Collected Papers 1933-1969* (Berkeley and Los Angeles, 1975), 161-88, esp. 170-84; idem, "Galileo and Avempace: The Dynamics of the Leaning Tower Experiment" in *Studies in Medieval Philosophy*, 203-86, esp. 257-58; A. Maier, *An der Grenze von Scholastik und Naturwissenschaft*, vol. 3 of *Studien zur Naturphilosophie der Spätscholastik*, 2d ed., *Storia e Letteratura: Raccolta di Studi e Testi* 41 (Rome, 1952), 225-27.

<sup>7</sup> Aristotle, *Phys.* 4.6 (213b4-15).



impenetrability of bodies.<sup>8</sup> Second he proves that the assumption of the existence of the void leads to the denial of the existence of local motion. This second conclusion is stronger than the first, since it claims that the void is not only unnecessary for the existence of local motion but even inconsistent with it.<sup>9</sup>

In order to understand Aristotle's arguments in favor of the second conclusion it is necessary to specify the meaning of the terms "void" and "local motion." In *Physics* 4.6-9 the term "void" is given different meanings, but it is not completely equivocal: understood both physically, as meaning incorporeal extension, and metaphysically, as meaning nothing, the term "void" stands for something absolutely undifferentiated and homogeneous. The term "local motion" stands, in most cases, for natural motion (and the related violent motion), i.e., the downward motion of heavy bodies and the upward motion of light bodies. Restated so as to make these meanings explicit, the Aristotelian conclusion concerning the incompatibility between the void and local motion can be expressed as follows: natural motion cannot occur in something devoid of qualitative differences.

In favor of this conclusion Aristotle formulates two principal groups of arguments. Those of the first group show that natural motion cannot occur in something undifferentiated because such motion could not be explained. For instance, even if one allows that a heavy body, once placed in the void, starts moving downwards, it is nevertheless impossible to explain why it moves in this direction or, more generally, why it moves instead of remaining at rest. The body might move in any other direction or remain at rest, since what surrounds it is absolutely undifferentiated.<sup>10</sup> The arguments of the second group show that natural motion cannot occur in something undifferentiated because such motion would possess some properties which contradict other basic properties of motion.<sup>11</sup>

The argument in question on the nontemporal character of natural motion in the void belongs to the second group.<sup>12</sup> The argument claims that natural motion in the void is impossible because such motion would not be temporal; but this is inconsistent with the very nature of motion, which necessarily requires time for its occurrence. To be more specific, the argument is based

<sup>8</sup> Ibid. 4.7 (214a26-32).

<sup>9</sup> Ibid. 4.8 (214b12-216a26).

<sup>10</sup> Ibid. 4.8 (214b17-24, 214b28-215a14, 215a19-22). On this topic see, for instance, D. J. Furley, "Aristotle and the Atomists on Motion in a Void" in *Motion and Time, Space and Matter: Interrelations in the History of Philosophy and Science*, ed. P. K. Machamer and R. G. Turnbull (Columbus, Ohio, 1976), 91-95.

<sup>11</sup> Aristotle, *Phys.* 4.8 (215a24-216a21).

<sup>12</sup> Ibid. 4.8 (215a24-216a12).

in turn on a quantitative law which obtains among the magnitudes involved in natural motion: the weight (or lightness) of the natural body; the density of the material medium; the time taken by the natural body to traverse the distance between the starting point of its motion and its natural place. The law states that the time taken by natural motion is directly proportional to the density of the medium and inversely proportional to the weight of natural body. From this law it follows that if the density of a medium A is greater than the density of a medium B, the time a body will take to traverse a certain distance in A is greater than the time it will take to traverse the same distance in B. But since the density of the void is zero, it also follows that a heavy body, for instance, will move downwards through the void in no time. In other words, its motion will be nontemporal or instantaneous.

In order to understand the lengthy discussions to which this argument gave rise among commentators, it is necessary to distinguish between the conclusion drawn by Aristotle and the principle from which it derives. The conclusion, that "natural motion in the void would be nontemporal," does certainly amount to a radical negation of the existence of the void, since in a void a body would apparently be in all the diverse places along its path at the same time. The principle from which this conclusion derives, and which governs the quantitative law concerning the density of the medium, the weight of the body, and the time of motion, states that the corporeal medium is a necessary condition for the existence of natural motion. But in specifying the function of the medium, Aristotle holds that it is an obstacle (ἐμποδίζει) to natural motion. So it turns out that the principle affirms that the existence of natural motion depends on the existence of the medium, which, however, is a hindrance to such motion.

This principle presents serious difficulties. First, the law of motion based on it does not appear in other passages in which Aristotle undertakes a systematic quantitative analysis of the laws of motion.<sup>13</sup> Hence this principle and the related law of motion seem to have been introduced as *ad hoc* arguments to deny the possibility of natural motion in the void.<sup>14</sup> Further-

<sup>13</sup> This point has been made by F. Solmsen, *Aristotle's System of the Physical World: A Comparison with His Predecessors* (Ithaca, N.Y., 1960), 137-38.

<sup>14</sup> This interpretation of Aristotle's argument is supported by Solmsen, *Aristotle's System*, 138. Among medieval commentators it was introduced by Thomas Aquinas: "... Et ideo melius et brevius dicendum est quod ratio Aristotelis inducta est ratio ad contradicendum positioni et non ratio demonstrativa simpliciter. Ponentes autem vacuum hac de causa ipsum ponebant ut non impediretur motus, et sic secundum eos causa motus erat ex parte medii, quod non impedit motum. Et ideo contra eos Aristoteles argumentatur ac si tota causa velocitatis et tarditatis esset ex parte medii" (St. Thomas Aquinas, *In octo libros Physicorum*

more, this principle not only seems to lead to the conclusion explicitly reached by Aristotle, i.e., the denial of the void, but also seems to imply the denial of natural motion as natural, inasmuch as the existence of such motion depends on something that is absolutely extrinsic and an obstacle to it, i.e., the medium.<sup>15</sup>

Among Aristotle's commentators, John Philoponus<sup>16</sup> and Avempace<sup>17</sup> stressed these difficulties in the Aristotelian argument for the impossibility of a temporal natural motion in the void. They also completely rejected Aristotle's conclusion and replaced it with an opposite one: natural motion in the void is temporal and, moreover, as such can occur only in the void. This is because only in the void is the time taken by natural motion the true and real time; when motion occurs in a material *plenum*, the obstacle offered by the *plenum* causes a retardation in such motion. In other words, a certain time has to be added to its real time.<sup>18</sup>

In the retrieval of Aristotle's argument a fundamental role was played by Averroes, who defended it against Avempace's criticism,<sup>19</sup> and supplied it with a firm foundation. Averroes's major contribution lies exactly in the justification he provides for the problematic principle according to which the obstacle offered by the medium is a necessary condition for the existence

*Aristotelis Expositio* 4.12 n.10, ed. P. M. Maggiolo [Turin, 1954; rpt. 1965], 258). I have changed the edition's punctuation.

<sup>15</sup> This objection was raised by Avempace in his refutation of Aristotle's argument for the nontemporal character of natural motion in the void. Avempace's criticisms are reported by Averroes in the famous t.c.71. See Averroes Cordubensis, *Aristotelis de Physico auditu libri octo* [*In Phys.*] 4 t.c.71, vol. 4 of *Aristotelis Opera cum Averrois commentariis* (Venice, 1562; rpt. Frankfurt, 1963), fol. 161G-H, M.

<sup>16</sup> Most of John Philoponus's *Corollarium de inani* is dedicated to the refutation of Aristotle's two main arguments against the possibility of natural motion in the void based on the laws of dynamics: (1) the argument for the nontemporal character of natural motion in the void; (2) the argument for the equality of the speed of natural motion in the void. See John Philoponus, *In Aristotelis Physicorum libros commentaria*, ed. H. Vitelli, 2 vols., *Commentaria in Aristotelem Graeca* 16-17 (Berlin, 1887-88), 2:677.9-686.29, 689.26-695.8. Simplicius seems to accept Philoponus's main criticisms against Aristotle's arguments. See Simplicius, *In Aristotelis Physicorum libros commentaria*, ed. H. Diels, *Commentaria in Aristotelem Graeca* 9 (Berlin, 1882), 677.22-678.7.

<sup>17</sup> See Averroes, *In Phys.* 4 t.c.71, fols. 160C-H, 161B-D, 161M.

<sup>18</sup> For a detailed exposition of Philoponus's position, see Duhem, *Le Système du Monde* 1:351-56, 361-65. See also M. Wolff, "Philoponus and the Rise of Preclassical Dynamics" in *Philoponus and the Rejection of Aristotelian Science*, ed. R. Sorabji (London, 1987), 91-96. On Avempace's position, see especially Moody, "Galileo and Avempace," 226-35; A. Maier, *Zwischen Philosophie und Mechanik*, vol. 5 of *Studien zur Naturphilosophie der Spätscholastik*, *Storia e Letteratura: Raccolta di Studi e Testi* 69 (Rome, 1958), 244-54.

<sup>19</sup> Averroes, *In Phys.* 4 t.c.71, fols. 160G-161M. For a detailed exposition of Averroes's criticisms of Avempace's position, see especially Maier, *Zwischen Philosophie und Mechanik*, 254-60.

of natural motion. This Averroes justifies as an application of a general law, which holds for any kind of motion, to the particular case of natural motion. The general law is formulated by Averroes as follows:

We however say that it is necessary that between the mover and the thing moved there be a resistance. For the mover moves the thing moved, insofar as it is contrary, and the thing moved is moved by it according as it is similar. And every motion will be according to the excess of the potency of the mover over the thing moved, and the diversity of motions in speed and slowness is according to this proportion which is between the two potencies and these resistances.<sup>20</sup>

This law tells us that the resistance offered by the *res mota* to the motive power is a necessary condition for every motion, since it is a necessary condition for the finitude of the resulting speed, i.e., for its temporal character.

Averroes does not establish precisely which kind of resistance must be offered to the motive power, but he does remark that the *res mota* must be actually distinct from the motive power in order to provide the resistance required for motion. From this requirement he infers that in the case of the natural motion of heavy and light bodies, the *res mota*, conceived as the cause of the resistance to the motive power, is not the heavy or light body itself, but the corporeal medium. This must be the case, for, Averroes holds, while the motive power can be identified as the *gravitas* or the *levitas* of natural body, the other constituent of a natural body, namely its matter, cannot be the *res mota*. This is because matter exists only potentially and hence cannot offer any kind of resistance.

Thus, Averroes grounded Aristotle's conclusion, that natural motion in the void would be nontemporal in character, on the general law of the resistance between motive power and the *res mota*. After formulating this law, Averroes explained its application to the different kinds of motion:

<sup>20</sup> "Nos autem dicamus quod necesse est quod inter motorem et rem motam sit resistentia. Motor enim movet rem motam secundum quod est contrarium et res mota movetur ab illo secundum quod est similis. Et omnis motus erit secundum excessum potentiae motoris super rem motam et diversitas motuum in velocitate et tarditate est secundum hanc proportionem quae est inter duas potentias" (Averroes, *In Phys.* 4 t.c.71, fols. 161M-162A; the translation is from Moody, "Galileo and Avempace," 232-33). I have changed the edition's punctuation in this passage and in the other passages quoted below from Averroes's commentary.

A. Maier has explained an ambiguity in the formulation of the relationship between the *potentia motoris* and the *res mota* given by Averroes ("omnis motus erit secundum excessum potentiae motoris super rem motam"); she remarks that the term *excessus* must be understood as *proportio* or quotient and not in its usual sense as arithmetic difference. See Maier, *Zwischen Philosophie und Mechanik*, 242-43.

... And this resistance comes either from the thing moved alone, when the thing that moves by itself and voluntarily is divided into mover in act and thing moved in act, as happens with animals and with celestial bodies, or it comes from the medium alone in which it moves, and this is the case when the thing moved is not divided into mover and thing moved in act, as certainly happens with simple bodies, or resistance comes from both, i.e., from the thing moved and from the medium, as happens with animals which move in the water. ... But those things which move by themselves and are not divided into a mover and a thing moved in act necessarily require a medium—and these are heavy and light bodies and, if there were no medium, they would move in no time, since there would be nothing in act which could resist the motive power.<sup>21</sup>

The appeal to the general law requiring the existence of a resistance to the motive power as a necessary condition for the temporal character of motion is due to Averroes himself, for neither Aristotle nor Greek commentators resort to it in connection with Aristotle's argument against the possibility of natural motion in the void. Instead, in the course of a lengthy refutation of Aristotle's arguments against motion in the void, in the *Corollarium de inani*, John Philoponus stresses the nonrelative and absolute character of weight and lightness, saying that these factors—not something else, i.e., the medium—are the causes of a motion with a finite speed.<sup>22</sup>

<sup>21</sup> "... Et ista resistentia aut erit ex ipso moto, quando illud quod movetur ex se voluntate dividitur in motorem in actu et rem motam in actu, sicut est dispositio in animalibus et in corporibus caelestibus, aut erit ex ipso medio in quo movetur, et hoc erit quando res mota non dividitur in motorem et rem motam in actu, sicut est dispositio etiam in corporibus simplicibus, aut resistentia erit ex utroque, scilicet ex re mota et ex medio, sicut est dispositio in animalibus quae moventur in aqua. ... Illa autem quae moventur ex se quae non dividuntur in motorem et rem motam in actu necessario indigent medio, et haec sunt corpora gravia et levia, et, si non, moverentur in non tempore, cum nihil sit actu illic quod resistat potentiae motivae" (Averroes, *In Phys.* 4 t.c.71, fol. 162A-C).

<sup>22</sup> The absolute character of heaviness and lightness is the ground of Philoponus's criticisms against Aristotle's second argument based on the quantitative laws of motion. In this argument Aristotle assumes that the heavier body moves faster downwards since a greater weight has a greater ability to cleave through a medium. Hence he infers that if there is no corporeal medium, bodies of different weights would move with equal speed; but this consequence is deemed absurd (see Aristotle, *Phys.* 4.8 [216a12-21]). Against this argument Philoponus argues: "And if bodies possess a greater or a lesser downward tendency in and of themselves, clearly they will possess this difference in themselves even if they move through a void. The same space will consequently be traversed by the heavier body in shorter time and by the lighter body in longer time, even though the space be void. The result will be due not to greater or lesser interference with the motion but to the greater or lesser downward tendency, in proportion to the natural weight of the bodies in question. For qualities do not belong to relatives, nor does their being consist in their mutual relation, as is the case, instead, for the visible and sight. Color, for instance, insofar as it is visible, belongs to relatives, but, insofar as it is white or black color, it is something else and not a relative. For being

Moreover, the general law formulated by Averroes had such a considerable influence upon medieval commentators that it has rightly been considered by A. Maier as a basic principle of medieval dynamics.<sup>23</sup> For if not all medieval commentators held the Aristotelian and Averroistic conclusion that natural motion in the void would occupy no time, all of them, nevertheless, accepted the principle of the necessity of a resistance to the motive power. Hence, in medieval discussions the question about the possibility of a temporal natural motion in the void was put in the following terms: whether, in the case of natural motion, the resistance is caused only by the corporeal medium, or by the mobile natural body as well, or by the void itself. If resistance is caused either by the natural body or by the void itself, then natural motion in the void is temporal; if, however, it is caused by the material medium only, then natural motion in the void is nontemporal.<sup>24</sup>

Giles of Rome accepts Averroes's opinion and maintains that the resistance in natural motion is caused by a corporeal medium only. Hence the conclusion of the first part of Giles's discussion follows, namely that natural motion in the void would be nontemporal.

#### THE NONTEMPORAL CHARACTER OF NATURAL MOTION IN THE VOID

Giles's arguments in support of the Aristotelian conclusion<sup>25</sup> are not a mere repetition of Averroes's arguments, which are essentially based on the identification of the *res mota* with the corporeal medium. Instead, Giles's arguments reflect an original interpretation of the Aristotelian notion of natural motion. In this interpretation the local character of natural motion is weakened, whereas its formal character, that is, its being similar to a motion *ad formam*, is stressed.<sup>26</sup>

color belongs to it not in virtue of something else but in virtue of itself, since color is a quality. Similarly, heaviness and lightness as well belong to the things which possess weight and lightness not in virtue of something else but only in virtue of themselves; but heaviness is the efficient cause of downward motion, whereas lightness is that of upward motion" (John Philoponus, *In Phys.* 2:679.18-30). The translation of the first part of this passage ("And . . . question") is taken from M. R. Cohen and I. E. Drabkin, *A Source Book in Greek Science* (Cambridge, Mass., 1948; rpt. 1966), 218; that of the second part is mine.

<sup>23</sup> See Maier, *Zwischen Philosophie und Mechanik*, 239-40.

<sup>24</sup> For an excursus about the major medieval opinions on this topic, see, for instance, Maier, *An der Grenze von Scholastik und Naturwissenschaft*, 219-54; Grant, *Much Ado about Nothing*, 24-41, 44-49.

<sup>25</sup> These arguments are contained in the first of the two groups of questions about natural motion in the void. See Aegidius Romanus, *In Phys.* 4.13, fols. 90vb-91vb; 14, fol. 92rb; 16, fol. 95rb-va.

<sup>26</sup> By *motus ad formam* Giles means the changes in the categories of quality and quantity.

In what follows we intend to show that, in Giles's view, the conclusion that natural motion in the void would occur in no time is a consequence of two main assumptions: the first is the analogy between natural motion and a motion *ad formam*; the second concerns the factors which cause motions *ad formam* to be temporal in character. Given these assumptions, Giles's interpretation of the problem of natural motion in the void may be summed up as follows: since natural motion is analogous to a motion *ad formam*, the factors which cause natural motion to be temporal must be similar to those which cause motion *ad formam* to be temporal; but the latter are formal and qualitative elements, which, however, cannot exist in the void conceived as a three-dimensional extension devoid of any quality.

In order to clarify exactly in what sense Giles regards natural motion as analogous to a motion *ad formam*, it is necessary to recall Aristotle's analysis of this motion in *Physics* 8.4. There, natural motion is described as a complex motion composed of two different kinds of motion. So, for instance, in the natural downward motion of a heavy body, the two motions are (1) the generation of the heavy body, and (2) the downward local motion. The first of these is to be understood as the acquisition of the substantial form of heavy body, which form is given by another element that generates the heavy body, the *generans*. The latter is regarded as the efficient cause of this motion. The second motion, that is, the downward local motion, is the passage toward natural place.<sup>27</sup>

The relationship which holds between these two different kinds of motion was clearly expressed by Averroes in his definition of the *generans*. This definition—as A. Maier remarks<sup>28</sup>—was commonly accepted and often repeated by medieval commentators:

For the *generans* is that which gives to the simple generated body its form and all accidents contingent upon the form, one of which is local motion; therefore, when form becomes completed in the body, so too its proper place and the other accidents will be completed, unless something impedes.<sup>29</sup>

In this definition, downward motion of heavy bodies and their location in low places presuppose and derive from the existence of the form. Another formulation of this principle, that natural local motion and the location

<sup>27</sup> Aristotle, *Phys.* 8.4 (254b33-256a3).

<sup>28</sup> See Maier, *An der Grenze von Scholastik und Naturwissenschaft*, 152. For an exposition of the major medieval interpretations of *Phys.* 8.4, see also *ibid.*, 143-82.

<sup>29</sup> "Generans enim est illud quod dat corpori simplici generato formam suam et omnia accidentia contingentia formae, quorum unum est motus in loco et ideo, cum forma fuerit completa in eo, complebitur ubi suum debitum et alia accidentia, nisi aliquid impediatur" (Averroes, *In Phys.* 8 t.c.32, fol. 370G).

of natural bodies depend upon the form, is the following: before acquiring this form, the simple body is *in potentia essentiali* with respect to downward motion and to actual location in a lower place, since a substantial change is necessary for the occurrence of these processes. After acquiring this form, however, the simple body is only *in potentia accidentali* with respect to these processes, because if the heavy body—once generated—does not actually move downwards, its not doing so depends exclusively on an extrinsic obstacle.<sup>30</sup>

Giles's interpretation of natural motion as analogous to a motion *ad formam* derives from Averroes's principle concerning the dependence of natural motion and a simple body's location at its natural place on that body's form. Introducing a modification that is slight only in appearance, Giles reduces the effect of the form of a heavy body to its being located in a low place: thus, from the presence of this form, location in a low place follows immediately, but downward local motion does not. Averroes's principle, therefore, takes a new shape:

The *generans* . . . insofar as it gave the heavy body the form of a heavy body gave it a place below.<sup>31</sup>

Giles's argumentation supporting the necessity of the medium for natural motion is based on this principle, as is clear from his answer to the question, "Whether the total cause of the time required in motion is the resistance of the medium" (*Utrum tota causa quare requiritur tempus in motu sit resistentia medii*):

When, therefore, it is asked whether the total cause of the time required in motion is the obstacle of the medium, if we speak of the proper motion of heavy and light bodies, which do not move by themselves, it is clear that the total cause of the time required in such motion is the obstacle of the medium. For heavy bodies are not in essential potency with respect to being below. Rather, as far as their form is concerned, they have essentially and in themselves to be below. For the *generans* insofar as it gave the heavy body the form of a heavy body gave it a place below. Therefore, for as long as the heavy body has the form of a heavy body, it also pertains to it essentially and *per*

<sup>30</sup> Ibid. t.c.32, fols. 370H-371I.

<sup>31</sup> "Generans . . . enim quantum dedit gravi de forma gravis tantum dedit ei de loco deorsum" (Aegidius Romanus, *In Phys.* 4.13, fol. 90vb). I have changed the edition's punctuation in this passage and in the other passages of Giles's commentary on the *Physics* quoted below.

This formulation appears also in other works by Giles. See 2 *Sent.* pars 1 d.7 q.1 art.2, 320aB; d.15 q.1 art.1, 622bB; pars 2 d.29 q.2 art.1, 398aC; d.33 q.2 art.2, 507aC; *De mat. caeli*, fol. 86va; *Hexaemeron* 13 (Rome, 1955), fol. 12rb.



se to be below. Heavy bodies therefore are never in essential potency with respect to being below, but either are actually there or, if they are not there in act, are only in accidental potency with respect to being there.<sup>32</sup>

The most important consequence of the essential identification of the effect of the form of the heavy body with being below is that local motion toward this place, as a temporal process, cannot be explained by the form. Such a process can only be explained by something that prevents the realization of the intrinsic effect of this form, namely the body's actually locating itself in a lower place.

This analysis suggests that there is a deep analogy between natural motion and a motion *ad formam* in the strict sense, such as, for instance, the qualitative motion of becoming black. First, both these motions have as a final state an intrinsic effect of a form; thus, being black is the final state effected by the form of black, just as is being in the body's low place, in the case of the form of heavy body. Moreover, the temporal process that precedes being black, for the body subject to alteration, or that precedes the heavy body's being below, does not derive in any positive sense from the form in question. Rather, this process is only a consequence of an obstacle to the realization of the intrinsic effects of these forms.

In the question just quoted, Giles concludes without further explanation that this obstacle is the corporeal medium. Thus he provides a first argument in favor of the nontemporal character of natural motion in the void, for he declares,

But when one thing is in accidental potency with respect to something, in order that this thing might pertain to the former, only what removes the hindrance is required. Since, therefore, heavy bodies are in accidental potency with respect to being below, if the hindrance and the obstacle is removed, they will immediately be below. And since what is hindering and preventing such motion is only the corporeal medium, the total cause of the time required in the motion of heavy and light bodies is, therefore, the resistance of the medium. Hence it is clear what must be said about the motion of such bodies.<sup>33</sup>

<sup>32</sup> "Cum igitur quaeritur utrum tota causa quare requiritur tempus in motu sit impedimentum medii, si loquimur de proprio motu gravium et levium, quae non moventur ex se, patet quod tota causa quare requiritur tempus in tali motu est impedimentum medii. Gravia enim non sunt in potentia essentiali ut sint deorsum. Immo ex forma sua essentialiter et per se semper habent quod sint deorsum. Generans enim quantum dedit gravi de forma gravis tantum dedit ei de loco deorsum. Quamdiu ergo grave habet formam gravis tamdiu essentialiter et per se competit ei esse deorsum. Gravia igitur numquam sunt in potentia essentiali ut sint deorsum, sed vel sunt actu deorsum vel, si non sunt actu ibi, sunt solum in potentia accidentali ut ibi existant" (Aegidius Romanus, *In Phys.* 4.13, fols. 90vb-91ra).

<sup>33</sup> "Sed cum aliquid respectu alicuius est in potentia accidentali, ad hoc quod competat ei illud non indiget nisi removente prohibens. Quia ergo gravia sunt in potentia accidentali ut sint deorsum, si tollatur prohibens et impediens, statim erunt deorsum. Et quia impediens

But there are two further questions to which no definite answer is given by the preceding argument. First, which properties of the corporeal medium confer on it the resistance to the realization of the intrinsic effect of the heavy body's form? And second, given that the corporeal medium is a sufficient condition for the temporal character of natural motion, is the medium also a necessary condition? In other words, is the medium the only cause of the resistance required by natural motion or are there other causes too?

To these two questions Giles responds that the corporeal medium can provide the resistance required by natural motion, since this medium is formally and qualitatively determined. Not only can the corporeal medium do so, but it is indeed the only cause of resistance in natural motion. This conclusion, too, is a consequence of the conception of natural motion as analogous to a motion *ad formam*. For, on this conception, Giles assumes that the conditions for the temporal character of natural motion are very similar to those for the temporal character of motion *ad formam*. Thus, because Giles's argumentation here presupposes his analysis of the structure of motion *ad formam*, it will be useful to recall the main lines of this analysis, taking as an example alteration, i.e., the motion through which a quality is acquired. The possibility of alteration as a successive and temporal process does not derive from quality considered *secundum essentiam*, that is, simply as formal determination. This is because, considered in this way, the quality is simple and indivisible; it cannot therefore be received partially and successively by the body subject to alteration. If, however, quality is considered "according to the being that it has in matter" (*secundum esse quod habet in materia*), its intensity varies, that is, quality is divisible in degrees of more and less intensity (*dividitur per maiorem et minorem intensionem*). This kind of divisibility with respect to intensity and remission (*intensio et remissio*) derives from the being that quality possesses when it is received in matter, since it is determined by the greater or lesser disposition (*dispositio*)—roughly, receptive capacity—of the receptive subject. Alteration, therefore, is a temporal and successive process because the subject's greater or lessened receptivity for the quality causes a divisibility in the quality itself with respect to its intensity. In virtue of this divisibility, a quality can be received partially and successively, i.e., temporally, by the body subject to alteration.

et prohibens in tali motu est solum corpus medium, ideo tota causa quare requiritur tempus in motu gravium et levium est resistentia medii. Patet ergo quid dicendum sit de motu talium" (ibid., fol. 91ra). This analysis is found also in *De mat. caeli*, fol. 86ra; *Quodl.* 16.1, 92b; 2 *Sent.* pars 1 d.1 art.1, 15aB-C.

There is also an inverse ratio (*proportio*) of the subject's disposition to the time taken by alteration: a greater disposition for the quality produces a decrease of the time taken by the acquisition of the form.<sup>34</sup> Given this proportionality, Giles remarks that if the subject is completely disposed to receive the quality—in other words, if there is no “opposing disposition” (*contraria dispositio*) towards the quality—the alteration would be instantaneous. This consequence is clearly underlined in a passage from the commentary on *Physics* 5:

... the total cause of the time taken in change is an opposing disposition. Not-white, therefore, insofar as it is not-white, cannot resist becoming white immediately, for, if from not-white it becomes white in time, this will not be insofar as it is not-white, but this will be because that not-white happens to be black or happens to have some other opposing disposition. . . .<sup>35</sup>

In this passage, Giles also specifies the nature of the “opposing disposition” as a quality which is contrary to or, more generally, different from the quality acquired with motion. In this way, the cause of the temporal character of a motion *ad formam* is a formal and qualitative element, namely, the opposing disposition.

Giles's argumentation concerning the essential role of the corporeal medium in natural motion presupposes the analysis of the motion *ad formam* just outlined. His reasoning is chiefly contained in the discussion of the question “Whether the quantity of space is the reason that time is required in motion” (*Utrum quantitas spatii faciat ut requiratur tempus in motu*), where Giles stresses the similarity between natural motion and motion *ad formam*. Denying that spatial extension, as a merely quantitative element, is enough to cause the resistance required by natural motion, Giles reaches this conclusion on the basis of the analogy between motion *ad ubi* and motion *ad formam*. In particular, Giles stresses the analogy between the causes of the temporal character in the two kinds of motions:

<sup>34</sup> Giles deals widely with the problem of the temporality and the continuity of motions *ad formam* and the related problem of the *intensio et remissio formarum* in the commentary on the *Physics* and in other works. See Aegidius Romanus, *In Phys.* 5.3, fol. 119ra-va; 4, fol. 122ra-va; 6.11, fol. 150rb-vb; *Quaestiones super De generatione et corruptione* (Venice, 1505; rpt. Frankfurt, 1970), q.18, fol. 60ra-va; q.19, fols. 60va-61ra; q.23, fol. 63rb-vb; q.24, fols. 63vb-64ra; q.25, fol. 64ra-va; *Quodl.* 2.14, 86a-90a; 3.10, 152b-154b.

<sup>35</sup> “. . . Tota causa quare requiritur in transmutatione tempus est dispositio contraria. Non album ergo ut non album est non habet [ut] <unde> resistat quin statim fiat album. <Si autem ex non albo fiat album> in tempore, hoc non <erit> ratione qua non album, sed hoc erit quia illud non album contingit esse nigrum vel contingit ipsum habere aliquam aliam dispositionem contrariam . . .” (Aegidius Romanus, *In Phys.* 5.8, fol. 130vb).

... For we see that the reason that time is required in motion *ad formam* is not quantity but the opposing disposition which exists in matter. For, if matter were sufficiently disposed to some form and had no opposing disposition towards that form, in the same instant in which something sufficiently active approached that matter, such a form would be introduced in all that matter. Moreover, it would make no difference whether that matter had a small or great quantity, for whatever quantity it had, because of its proximity to something sufficiently active, it would instantaneously receive the required form. ... Just as is the case, therefore, in motion *ad formam*, so, in its way, is the case in motion *ad ubi*. And this is why just as time is required in motion *ad formam* not because of quantity but because of an opposing disposition, so time is required in motion *ad ubi* not because of the quantity of space but because of the resistance or because of the obstacle of the medium. The hindering medium's role in the motion of heavy and light bodies is, therefore, the same as of the subject's opposing disposition in motions *ad formam*. Consequently, if there were a void space and every resistant medium were subtracted from it, the mobile would traverse that space in no time.<sup>36</sup>

The similarity between motion *ad ubi* and motion *ad formam* is also confirmed by Giles's criticisms of Thomas Aquinas's position. According to Thomas and according to the argument criticized in the passage quoted above, the temporal character of motion is explained by merely quantitative elements. Thomas follows Averroes's treatment of the problem of motion in the void and maintains, therefore, that the existence of natural motion as a temporal process depends on the resistance offered to the motive power (the form of the heavy body). But Thomas does not accept Averroes's conclusion concerning natural motion in the void, arguing instead that the resistance can be offered by the mobile body itself, even if there is no corporeal medium. The mobile body can offer such resistance because it

<sup>36</sup> "... Videmus enim quod tota causa quare in motu ad formam requiritur tempus non est quantitas, sed est contraria dispositio existens in materia. Si enim materia esset sufficienter disposita ad aliquam formam et non haberet contrariam dispositionem illi formae, in illo instanti in quo appropinquaret sufficiens activum illi materiae induceretur talis forma <in> tota illa materia, nec referret utrum materia illa esse<t> parvae quantitatis vel magnae, quia, quantaecumque quantitatis esset, per approximationem ad sufficiens activum et in instanti susciperet debitam formam. ... Sicut ergo est in motu ad formam sic suo modo est in motu ad ubi. Propter quod sicut ratione quantitatis non requiritur tempus in motu ad formam, sed ratione contrariae dispositionis, sic in motu ad ubi non requiritur tempus ratione quantitatis spatii, sed ratione resistentiae vel ratione impedimenti medii. Hoc ergo in motu gravium et levium facit medium impediens quod in motu ad formam facit contraria dispositio in subiecto. Quare si esset aliquod spatium vacuum et in eo tolleretur omne medium resistens, mobile pertransibit illud spatium in non tempore" (ibid. 4.13, fol. 91ra-b).

The analogy between motion *ad ubi* and motion *ad formam* appears also in 2 *Sent.* pars 1 d.14 q.1 art.3, 595aC-bC.

is a *corpus quantum*. Thomas introduces and explains the notion of *corpus quantum* as follows: if every quality, and thus the heaviness (*gravitas*) and the lightness (*levitas*), is removed from the natural body, what is left is not prime matter but the *corpus quantum*, i.e., corporeal dimensions.<sup>37</sup>

Giles rejects Thomas's position, maintaining after all that the temporal character of natural motion cannot be explained by quantity alone:

... and if one says that once form is removed, although matter with quality does not remain (since quality is retained on the part of form), nevertheless matter with quantity does remain (since quantity is retained on the part of matter), as is clear from what has been shown, still it is not true that because of this a time is required there. For, as has been shown, no time is required in motion because of quantity, unless some opposing disposition, some resistance, or some other obstacle is joined to quantity itself.<sup>38</sup>

In this passage, the cause of the resistance required by natural motion is more explicitly identified as an "opposing disposition"; but the "opposing disposition" is, strictly speaking, the cause of the temporal character of motion *ad formam*. This confirms that the main assumption of Giles's argumentation in favor of the nontemporal character of natural motion in the void is the analogy between natural motion and a motion *ad formam*. For this analogy explains why the resistance required by natural motion

<sup>37</sup> In his confutation of Averroes's criticisms to Avempace's position, Thomas declares, "Deinde quia in gravibus et levibus, remota forma quam dat generans, remanet per intellectum corpus quantum, quod ex hoc ipso quod quantum est, in opposito situ existens, habet resistantiam ad motorem—non enim potest intelligi alia resistantia in corporibus caelestibus ad suos motores—unde nec etiam in gravibus et levibus sequetur ratio Aristotelis secundum quod ipse dicit" (Thomas Aquinas, *In Phys.* 4.12 n.10, 258). I have changed the edition's punctuation.

The quoted passage contains the main argument formulated by Thomas to show the possibility of a temporal natural motion in the void. The importance of the notion of *corpus quantum* in the development of Aristotelian dynamics has been stressed by P. Duhem: "... pour la première fois, nous venons de voir la raison humaine distinguer, en un corps grave, ces deux éléments: la forme motrice, c'est-à-dire, en langage moderne, le poids, et la chose mue, qui est le *corpus quantum* ou, comme nous disons aujourd'hui, la masse. ... L'analyse de Saint Thomas d'Aquin, complétant celle d'Ibn Bâdjâ, est parvenue à dissocier en un grave qui tombe, ces trois notions: le poids, la masse, la résistance du milieu, sur lesquelles raisonnera la Physique des temps modernes" (Duhem, *Le Système du Monde* 8:19).

But, as E. Grant remarks, Thomas's notion of *corpus quantum* as a cause of the resistance required by natural motion never gained much support (Grant, *Much Ado about Nothing*, 39).

<sup>38</sup> "... quod si dicatur quod, abstracta forma, si non remanet materia cum qualitate, quia qualitas se tenet ex parte formae, remanet tamen materia cum quantitate, quia quantitas se tenet ex parte materiae, ut patet per habita, propter hoc non requiritur ibi tempus. Nam, ut ostensum est, ratione quantitatis non requiritur tempus in motu nisi ipsam quantitatem committetur aliqua contraria dispositio vel aliqua resistantia vel aliquod aliud impedimentum" (Aegidius Romanus, *In Phys.* 4.13, fol. 91va-b).

can be caused neither by the void—construed as three-dimensional incorporeal space—nor by the *corpus quantum*—as Thomas believes—inasmuch as both these things lack quality and, therefore, any disposition opposing the form.

The interpretation of Giles's position on natural motion in the void offered above also indicates how an apparent contradiction in Giles's treatment of space as separate dimensions may be resolved. As we have elsewhere shown,<sup>39</sup> when Giles deals with separated dimension as the place of bodies, he maintains that the basic property of both corporeal and incorporeal dimension is resistance. Furthermore, he infers from this property some absurd consequences of the doctrine that assumes separated dimension as the place of bodies, as, for instance, in accepting that the principle of the impenetrability of bodies may be violated. Thus there seems to be a contradiction in Giles's doctrine: when he deals with space as the place of bodies, he ascribes the resistance they encounter to dimension, but when he deals with natural motion in the void, he denies that resistance is to be attributed to the void, which is, however, identified with incorporeal dimension.

Giles does not explicitly face this problem, which is not, however, based on a real contradiction. After all, the resistance ascribed to dimension and the one denied of the void turn out to be two different kinds of resistance. For, as we have seen, the resistance denied of the void is identified with an "opposing disposition" as a qualitative determination which is in opposition to another qualitative determination, i.e., the form of the heavy body, whereas the resistance ascribed to dimension is the property that makes it impossible for two dimensions to be *simul*, i.e., in the same place. This kind of resistance, therefore, is connected with the spatial relationships among extended things considered merely as quantity; but just because of its quantitative nature, it is not the kind of resistance required for the temporal character of natural motion.

#### THE *DISTANTIA TERMINORUM* ARGUMENT

The analysis of the first group of questions concerning natural motion in the void has shown that Giles's arguments in favor of the Aristotelian doctrine are based on the analogy between natural motion and a motion *ad formam*. But these arguments do not seem conclusive, since they do not take into account the local aspect of natural motion—that is, the passage

<sup>39</sup> See C. Trifogli, "La dottrina del luogo in Egidio Romano," *Medioevo: Rivista di storia della filosofia medievale* 14 (1988): 237-48.

towards the natural place. Giles declares only that this passage takes time because of the resistance caused by an "opposing disposition" existing in the corporeal medium, as is the case in motions *ad formam*. In the local motion of the element towards its natural place, however, there is a quantitative aspect which cannot be neglected in discussing the temporal character of natural motion in the void: the extent of space traversed by the mobile body. For just because natural motion takes place over a spatial extension, it seems to follow necessarily that such motion occurs in a certain time and not instantaneously, even if there is no other kind of resistance. And for this same reason, natural motion does not seem to be completely analogous to a motion *ad formam*: there is no contradiction in the assertion that a body receives the form of white simultaneously all over its surface, but there is a contradiction in the assertion that the mobile body occupies different parts of space simultaneously.<sup>40</sup>

This objection against Aristotle's conclusion, that the character of natural motion in the void is nontemporal, is formulated in detail by Giles in the question "Whether in a void motion would be instantaneous" (*Utrum in vacuo esset motus in instanti*). The argument against the instantaneity of natural motion in the void runs as follows:

... though in the void it is not possible to assign a corporeal medium, since the void is a space deprived of body, it is possible, however, to assign a spatial medium there. If, therefore, some mobile body were to traverse some void space, then it would be in the middle and in the end of that space either

<sup>40</sup> These criticisms against Giles's analogy between local motion and motion *ad formam* were raised by William Ockham: "... in aliis motibus, puta in motu ad formam, tota quantitas potest simul recipere et simul retinere formam ad quam est motus, sicut totum corpus potest simul recipere et simul retinere albedinem et aliam qualitatem ad quam potest esse motus. Sed tota quantitas secundum quam debet esse motus localis non potest simul recipere nec simul retinere mobile, immo quando mobile est in una parte quantitatis, non est in alia, sicut mobile quando est in medio inter sursum et deorsum, nec est sursum nec deorsum. Et ideo quamvis quantitas non faceret motum ad formam esse in tempore, faceret tamen motum localem esse in tempore" (William Ockham, *Expositio in libros Physicorum Aristotelis* 4.14 in vol. 5 of *Opera Philosophica*, ed. R. Wood, R. Green, et al. (St. Bonaventure, N.Y., 1985), 149.54-150.63).

On the basis of a systematic textual comparison, E. A. Moody has proved that the stance on the nontemporal character of natural motion in the void criticized by Ockham in the commentary on *Phys.* 4.8 is that of Giles of Rome (see Moody, "Ockham and Aegidius of Rome," 170-80). But Ockham's criticisms are only concerned with the first group of Giles's questions that have been analyzed above (pp. 145-46). Furthermore, these criticisms are mainly based on taking the *distantia terminorum* argument as intended to be an argument sufficient to show the temporal character of natural motion in the void. Giles, on the other hand, faces and solves this argument in the second group of questions, which are analyzed below (pp. 154-57).

in the same instant or in different instants. It is not possible to say that this happens in the same instant, since one and the same body cannot be located in different places simultaneously. This will happen, therefore, in different instants. But between any two instants a time intervenes. Such motion, therefore, will be in time.<sup>41</sup>

A version of a famous argument against Aristotle's assertion of the nontemporal character of natural motion in the void is contained in this passage: the so-called "distance of the termini" (*distantia terminorum*) argument.<sup>42</sup> Like other medieval commentators, Giles ascribes this argument to Avempace,<sup>43</sup> though it is not mentioned by Averroes in his detailed exposition of Avempace's opinion. In fact, it already appears in the *Corollarium de inani* of John Philoponus.<sup>44</sup>

Giles's solution of the *distantia terminorum* argument can be summed up as follows: the natural body is in different parts of the void space *in the same instant*; nevertheless, it is in such parts *successively* and not simultaneously. Since "simultaneously" means "in the same instant," it is clear that Giles refers to two different temporal series. One of them is time in the Aristotelian sense, as a continuous successive quantity, which inheres in the celestial motion (*tempus caeleste*) and plays the role of extrinsic (i.e., noninhering) measure of all the other motions; the other temporal series is associated specifically to the natural motion itself and it represents its intrinsic measure (*mensura propria*). So Giles's solution is more precisely formulated by saying that the natural body is in different parts of the void space in the same instant of the celestial time, but in different successive instants of the time associated with its motion.

<sup>41</sup> "... Licet in vacuo non sit assignare medium corporis quia vacuum est spatium privatum corpore, est tamen ibi assignare medium spatii. Si ergo aliquod corpus mobile pertransiret aliquod spatium vacuum, aut in eodem instanti esset in medio et in fine illius spatii aut in alio et alio instanti. Non est dicere quod in eodem instanti, quia unum et idem corpus diversis locis localiter simul et semel esse non potest. Ergo hoc erit in alio et in alio instanti. Sed inter quaelibet duo instantia cadit tempus medium. Erit ergo huiusmodi motus in tempore" (Aegidius Romanus, *In Phys.* 4.13, fol. 91rb).

<sup>42</sup> *Distantia terminorum* is to be understood as the spatial extension which is between the starting point and final point of local motion.

<sup>43</sup> Aegidius Romanus, *In Phys.* 4.13, fol. 91rb.

<sup>44</sup> Philoponus provides the following explanation of the temporal character of motion in the void: "... Absolutely every motion takes some time because of the fact that it is not possible for the thing moved to be in both extremes simultaneously" (John Philoponus, *In Phys.* 2:684.24-25; see also 2:690.14-17).

A brief history of the origin and the reception of the *distantia terminorum* argument among medieval commentators has been traced by E. Grant in *Much Ado about Nothing*, 27-38.



In order to understand Giles's original solution, it is necessary to investigate further the structure of natural motion in the void and the temporal series associated with it.

As Giles conceives natural motion in the void, it contains two essential properties, the first being the multiplicity of *mutata esse*, i.e., indivisible elements of motion, analogous to the points of the line and to the instants of time. This multiplicity derives, in turn, from the multiplicity of the parts of the spatial extension traversed by the heavy body. In other words, Giles maintains that there is a correspondence between the *mutata esse* of motion and the parts of extension: for each spatial position occupied by the heavy body, there is a correspondent *mutatum esse* in its motion. The second essential property is that there is no *moveri*, i.e., motion as continuous quantity, between any two *mutata esse*.<sup>45</sup>

In his own analysis, Giles compares the downward motion of a heavy body in the void with a particular kind of motion *ad formam*: the illumination of the air. These two motions have an important common feature: the lack of any resistance offered to the form. For air, as diaphanous body, has no "opposing disposition" to the form of light. But since resistance is the cause of the time taken in motion, the illumination of the air is not a temporal and continuous motion. Rather, it is simply a set of *mutata esse*, which are also described as *generationes lucis*: the light generated in a part of the air generates the light in the successive part.<sup>46</sup>

Hence, both the natural downward motion of the heavy body in the void and the illumination of the air consist of a multiplicity of *mutata esse*, but they are not motions in the Aristotelian sense, i.e., continuous motions. As Giles remarks,

... For just as, although the illumination of the air is not motion, nevertheless, because of the different parts of the air it is possible to assign many generations of light and many *mutata esse* there, so, although the descent of the heavy body in the void is not motion, nevertheless, because of the different parts of the space, which is assumed to be void, it is possible to assign many *mutata esse* there. But among many *mutata esse* no *moveri* would intervene, since no resistance—which local motion presupposes—would be there, just as among

<sup>45</sup> The fact that there is a *moveri* before any *mutatum esse* and, conversely, there is a *mutatum esse* before any *moveri* is a consequence of the continuity of motion which Aristotle proves in *Phys.* 6. See Aristotle, *Phys.* 6.6 (236b32-237b22).

<sup>46</sup> See Aegidius Romanus, *In Phys.* 4.13, fol. 111ra. On the illumination of the air and the nature of light, see especially Aegidius Romanus, *Expositio super libros De anima* 2 (Venice, 1496), fols. 41va-42rb; *Hexaemeron* 9-12, fols. 31rb-34vb. The analogy between motion in the void and the illumination of the air is repeated in 2 *Sent.* pars 1 d.14 q.1, 595aC-bD.

many *mutata esse* in the illumination of the air no *moveri* intervenes, since there is no opposing disposition of matter there, which motion *secundum formam* presupposes. Hence it is evident that, just as the illumination of the air is not motion, since then motion would be composed of *mutata esse* without *moveri*, so the descent of the heavy body in the void is not motion, since there are *mutata esse* without some *moveri* intervening between them. It is evident, therefore, that, although the descent of the heavy body in the void is not motion, nevertheless, if such descent occurred, there would be many *mutata esse*.<sup>47</sup>

The temporal series associated with natural motion in the void is characterized by a multiplicity of instants, which correspond to the multiple *mutata esse* of this motion, in such a way that there is no continuous temporal extension between any two instants.<sup>48</sup>

To put the issue more precisely, Giles stresses the Aristotelian principle that the continuity of time depends upon that of motion. So he argues that time ("the number of a motion with respect to before and after") is essentially a discrete quantity, a number, whereas it is a continuous quantity only in a derivative sense, that is, because of the continuity of motion whose measure it is.<sup>49</sup> Giles concludes that the multiple instants which measure downward motion in the void are not continuous, since such motion does not take time:

<sup>47</sup> "... Nam sicut, licet illuminatio aeris non sit motus, tamen propter diversas partes aeris est ibi dare plures generationes lucis et plura mutata esse, sic, licet descensus gravis in vacuo non sit motus, tamen propter diversas partes ipsius spatii, quod ponitur esse vacuum, esset ibi dare plura mutata esse. Sed tamen inter plura mutata esse non caderet medium aliquod moveri, quia non esset ibi resistentia aliqua, quam praesupponit moveri secundum situm, sicut nec inter plura mutata esse in illuminatione aeris cadit medium aliquod moveri, quia non est ibi dare contraria dispositio materiae, quam praesupponit motus secundum formam. Ex quo manifeste apparet quod, sicut illuminatio aeris non est motus, quia tunc motus componeretur ex mutatis esse absque moveri, sic descensus gravis in vacuo non est motus, quia ibi est dare mutata esse absque eo quod inter illa mutata esse intercipiatur aliquod moveri. Patet ergo quod, licet descensus gravis in vacuo non sit motus, attamen si esset dare talem descensum, esset ibi dare plura mutata esse" (Aegidius Romanus, *In Phys.* 4.27, fol. 111rb).

<sup>48</sup> With respect to this property the hypothetical descent of the heavy body in the void differs from the illumination of the air. For Giles argues that the multiplicity of *mutata esse* of the illumination of the air does not require a corresponding set of instants as intrinsic measure (see Aegidius Romanus, *In Phys.* 4.27, fol. 111ra-b). This conclusion seems to reflect Giles's attempt to save, as far as it is possible, Aristotle's claim of the unicity of time. On this aspect of Giles's theory of time, see C. Trifogli, "La dottrina del tempo in Egidio Romano," *Documenti e studi sulla tradizione filosofica medievale* 1.1 (1990): 247-76.

<sup>49</sup> This interpretation is based on the distinction between time *formaliter* and time *materialiter*. Time is *formaliter* a number, but it is *materialiter* the same as the motion to which it inheres (see Aegidius Romanus, *In Phys.* 4.19, fol. 99va-vb; 20, fol. 101ra-b).

If, therefore, the descent of the heavy body in the void is not motion, and among the *mutata esse* in such descent no *moveri* intervenes, since the very motion or *moveri* in virtue of which such *mutata esse* are continuous is removed, it follows that those instants are neither continuous nor limits of a *continuum*. Rather, as has been said, among those instants no time intervenes, just as among those *mutata esse* no *moveri* intervenes. But there is no question whether some time is composed of those instants, because unless the term "time" is taken in a wholly equivocal sense, time is not composed of instants. . . ."<sup>50</sup>

While Giles denies that the multiplicity of instants makes up a continuous time, he nevertheless ascribes succession to those instants. In the case of natural motion in the void, Giles's decision to ascribe succession to instants is determined by the objection raised by the *distantia terminorum* argument against Aristotle's conclusion that such motion would take no time. For the objection remains, if those instants are not successive:

For if we say that there is no succession there, then, since those instants would measure all the *mutata esse* of the heavy body itself in the void . . . it follows that the heavy body would be in different parts of the void space simultaneously. If, indeed, some mobile body traverses some space, no matter if that space is void, to say that it does not traverse that space successively and that it is <not> in different parts of that space simultaneously seems to be a contradiction in terms.<sup>51</sup>

Giles devotes much effort to the solution of an apparent contradiction concerning the notion of successive instants. The difficulty is in claiming that one instant is *after* another, while the whole multiplicity of instants has no more extension in time than a single instant.<sup>52</sup> Thus, Giles points out,

<sup>50</sup> "Quare si descensus gravis in vacuo non est motus et inter mutata esse in tali descensu <non> intercipitur aliquod moveri medium, quia sublatus est ipse motus vel ipsum moveri, a quo talia habent continuitatem, sequitur illa instantia nec esse continua nec esse terminos continui. Immo, ut dictum est, inter illa instantia nullum intercipitur tempus sicut nec inter illa mutata esse intercipitur aliquod moveri. Quaerere autem utrum ex illis instantibus constituatur aliquod tempus non habet dubium, quia, nisi accipiat tempus omnino aequivoce, ex instantibus non constituitur tempus . . ." (Aegidius Romanus, *In Phys.* 4.27, fol. 111va).

<sup>51</sup> "Si enim dicimus quod [s]ibi non sit successio, tunc, cum illa instantia mensurent omnia mutata esse ipsius gravis in vacuo, si in illis instantibus non est successio, sequitur quod grave sit simul in diversis partibus spatii vacui. Si enim aliquod mobile pertranseat aliquod spatium, quantumcumque illud sit vacuum, dicere quod non pertranseat illud successive et dicere quod <non> sit simul in diversis partibus illius spatii videtur esse oppositum in adiecto" (ibid., fol. 111vb).

<sup>52</sup> It should be remarked, however, that Aristotle's definition of successive entities (ἐφεξῆς) does not at all imply that such entities must have an extension, for it simply states that B is ἐφεξῆς on A, if it follows on A in some series and there is nothing of the same kind

If we admit that those instants are successive, although all those instants are no more than one instant, because between them—as has been said—no time intervenes, it follows, so it seems, that in the same instant succession can exist, and so there is succession between those instants which are no more than one instant.<sup>53</sup>

So the difficulty turns out to be the following: the multiplicity of instants is no more than one instant; but it would appear that in the same instant no succession, i.e., before and after, can exist, since any instant lacks parts and extension.

The preceding argument, however, is not after all conclusive, Giles argues, because there can be succession, especially of indivisibles, without the whole adding up to more than one of the parts. In particular, Giles proves that it is possible to define a succession between two temporal elements whose total magnitude is no greater than the magnitude of just one of the two. He refers to an Aristotelian doctrine concerning the temporal description of change,<sup>54</sup> and he remarks that this kind of succession obtains between a period of time and the last instant of this period:

Succession can exist where there is no increase of quantity. For between time and instant there is succession since, if something changes from white to black, it will not be white and black simultaneously, but for the whole time it will be white and in the final instant of that time it will be black. There will be, therefore, a succession between time and instant. Therefore, just as between time and instant there is succession, but time and instant are no more than just time—since an instant adds no magnitude to time, nor a point to a line—so also among the multiplicity of instants which measure the *mutata esse* in the void succession can exist, although that multiplicity of instants is no more than just one instant.<sup>55</sup>

between A and B. On the contrary, one of Aristotle's examples of successive entities is precisely taken from numbers. He also clearly states that successive entities do not need to be in contact. So the notion of successive instants is not inconsistent with Aristotle's definition of succession. See, Aristotle, *Phys.* 5.3 (226b34–227a6, 227a17–21). On some difficulties in Aristotle's treatment of the relationship between continuity and succession in *Phys.* 6.1, see D. J. Furley, "The Greek Commentators' Treatment of Aristotle's Theory of the Continuous" in *Infinity and Continuity in Ancient and Medieval Thought*, ed. N. Kretzmann (Ithaca, N.Y., 1982), 27–31.

<sup>53</sup> "Si concedimus inter illa instantia cadere successionem, cum omnia illa instantia non sunt plus quam unum instans, quia inter ea, ut dictum est, nullum cadit tempus medium, sequitur, ut videtur, quod in eodem instanti possit esse successio, postquam inter illa instantia est successio quae non sunt plus quam unum instans" (Aegidius Romanus, *In Phys.* 4.27, fol. 111vb).

<sup>54</sup> Aristotle, *Phys.* 8.8 (263b9–264a6).

<sup>55</sup> "Nam potest esse successio ubi non intervenit maior quantitas. Inter tempus enim et instans est successio quia, si aliquid de albo fiat nigrum, non erit simul album et nigrum, sed per totum tempus erit album et in instanti ad quod copulatur erit nigrum. Erit ergo

The preceding discussion about the succession of the instants of the temporal series associated with natural motion in the void explains only one of the two assertions into which Giles's solution of the *distantia terminorum* argument is articulated, namely that the heavy body is in different parts of the void space in different successive instants of the time intrinsic to its motion. It is not yet established, however, whether this assertion is consistent with the other one, i.e., that the heavy body is in different parts of the void space in the same instant of the continuous celestial time. This question is clearly concerned with the relationship between the two temporal series against which natural motion in the void is measured and can be reformulated in Giles's terms as follows: is it possible that many instants of the time associated with natural motion correspond to just one instant of the celestial time? Giles holds that it is possible. Although this claim is left without a real proof, nevertheless, it seems to be based on the quantitative properties of such multiplicity of instants: since each of these instants lacks magnitude, and no temporal extension intervenes between any two of them, the whole succession of these instants lacks magnitude and so can correspond to just one instant of the celestial time, or, in other words, it takes just one instant and no finite duration.<sup>56</sup>

successio inter tempus et instans. Sicut igitur inter tempus et instans est successio nec tamen tempus et instans est plus quam tempus solum, quia instans nullam addit magnitudinem supra tempus, sicut nec punctus supra lineam, sic etiam inter plura instantia mensurantia mutata esse in vacuo potest esse successio, non obstante quod illa plura instantia non sunt plus quam unum instans" (Aegidius Romanus, *In Phys.* 4.27, fol. 112ra).

See also *Quodl.* 7.4, 378b-381a. E. Grant has strongly criticized Giles's solution of the *distantia terminorum* argument: "... In this manner did Aegidius believe that a body could move through a void instantaneously but successively. Aegidius' argument is, of course, absurd. It presupposes succession and instantaneity of motion simultaneously. If instantaneous motion is understood as the simultaneous occupation of all the points of a given distance, those points cannot also be said to have been traversed successively and, therefore, temporally..." (Grant, *Much Ado about Nothing*, 36).

Grant's criticisms, however, do not seem well-grounded. For Giles does not believe that motion occurs both successively and instantaneously with respect to the same temporal series; he maintains that it occurs successively and in a multiplicity of instants with respect to the temporal series associated with it and instantaneously with respect to the celestial time. Moreover, from the fact that motion occurs successively he does not infer that it occurs in time, i.e., in a period of time, since there is no temporal extension between any two successive instants.

<sup>56</sup> This explanation is suggested by the comparison with spatial magnitudes used by Giles to show the possibility of the correspondence in question: "Sicut uni et eidem puncto in linea continua possunt respondere infinita puncta in lineis intercisis—super uno et eodem puncto lineae continuae possunt collocari infinitae lineae intercisiae, ad modum linearum procedentium a centro ad circumferentias; quo posito, uni et eidem puncto in potentia in linea continua respondent infinita puncta in actu in lineis intercisis—sic uni et eidem instanti in caelo possunt respondere infinita instantia in motu facto in vacuo" (Aegidius Romanus, *Quodl.* 7.4, 380a). I have changed the edition's punctuation in this passage and in the one quoted in the next note.

Giles himself summarizes very clearly his solution of the *distantia terminorum* argument in a passage taken from his *Quodlibeta*:

Hence, when it is asked, if a body moved in the void, whether it would be above and below in the same instant, you ask it either about the instant of the proper measure or about the instant of the nonproper measure, that is, of time which inheres in the first motion. If you ask it about the instant of the proper measure, then it is not true that in the same instant this body is above and below; on the contrary, there will be as many successions of instants as successions of *mutata esse*; nevertheless, no time will intervene between those instants, but one instant will be immediately successive to another. . . . But if you ask it about the instants of the nonproper measure, thus in the same instant the moving body will be above and below, since to all these instants [i.e., those of the proper measure] just one instant of the celestial time will correspond.<sup>57</sup>

Where this second part of Giles's discussion of natural motion in the void is concerned, one may remark that it does not contradict the conclusion of the first part, that is, that natural motion in the void takes no temporal extension. After all, when the continuous spatial extension traversed in natural motion is taken into account, this leads to the introduction of a certain kind of succession in natural motion and in the time that measures it; but this is a succession of elements that lack any magnitude and, therefore, it makes up neither a continuous motion nor a continuous time.

### CONCLUSION

According to this analysis of Giles's discussion of natural motion in the void, his views present two major original points: the first concerns specifically a doctrinal aspect, the second the general character of Giles's approach to this problem.

<sup>57</sup> "Cum ergo quaeritur utrum in eodem instanti, si [si *post* utrum, *ed.*] corpus moveretur in vacuo, esset sursum et deorsum, aut quaeris de instanti mensurae propriae aut de instanti mensurae non propriae, cuiusmodi est tempus quod est passio primi motus. Si de instanti mensurae propriae, non in eodem instanti erit sursum et deorsum, immo quot erunt ibi successiones mutatorum esse, tot erunt ibi successiones instantium; sed inter illa instantia non cadet tempus medium, sed succedent sibi immediate adinvicem. . . . Sed si quaeris de instanti[a] mensurae non propriae, sic in eodem instanti erit corpus sic motum sursum et deorsum, quia omnibus illis instantibus non respondebit nisi unum instans in caelo" (Aegidius Romanus, *Quodl.* 7.4, 379b). Giles also claims that the simultaneity of two events must be defined with respect to their intrinsic measure, that is, they are simultaneous if they take place in the same instant of their intrinsic measure. So although the heavy body is below and above in the same instant of the celestial time, it is not there simultaneously. See, Aegidius Romanus, *Quodl.* 7.4, 379b-380a; *In Phys.* 4.27, fol. 112ra.

The first is apparent in Giles's understanding of the famous argument of *Physics* 4.8: natural motion in the void would take no time. At least two interpretations can be given to this conclusion: (1) that natural motion occurs in an instant; or (2) that natural motion occurs in a multiplicity of successive instants not separated by time.

The first interpretation is, certainly, the only one which reflects Aristotle's intention and is commonly accepted by both Greek and medieval commentators. It is accepted by Giles himself, provided that the instant in question is understood as belonging to the continuous celestial time. But in virtue of the introduction of a temporal series associated specifically with natural motion in the void, Giles accepts also the second interpretation, which is very likely to have been first proposed by him. It clearly departs from Aristotle's assumptions about time, but it permits Giles to avoid the logical difficulty of the mobile body's being in different places simultaneously, into which the first interpretation seems to run. Furthermore, it must be remarked that both the introduction of a different temporal series and the notion of time as *successio instantium* can be considered not simply as devices that Giles uses to find a solution to the *distancia terminorum* argument but rather as well-grounded aspects of Giles's physical thought.<sup>58</sup>

A second way in which Giles's discussion of natural motion in the void is clearly original becomes apparent when one compares the notions involved in Aristotle's argument in *Physics* 4.8 with the notion of natural motion proposed by Giles, i.e., motion conceived as a succession of *mutata esse* and as measured by a succession of instants. For the argument of *Physics* 4.8 belongs to Aristotelian dynamics, whereas the Aegidian notion of natural motion belongs to another chapter of Aristotelian physics: the theory of the *continuum*. In particular, Giles's treatment of this argument differs fundamentally from those of Philoponus, Avempace, Averroes, and Thomas Aquinas, since it does not concern dynamics. This is clear from the fact that the main notions involved—*gravitas*, time, and the corporeal medium—are almost completely deprived of their dynamic meaning and are considered according to their metaphysical meaning. Thus, *gravitas* is not considered as a motive power but simply as form; time is not related to the speed of natural motion but is discussed only in terms of its general property of being continuous and successive; and the corporeal medium is characterized as "opposing disposition," i.e., as a kind of form. As a consequence, the whole question of dynamics concerning the finitude of the speed of natural motion in the void has been changed by Giles into

<sup>58</sup> See Trifogli, "La dottrina del tempo in Egidio Romano," 265-75.

a question about the basic metaphysical structure of this motion, that is, about continuity and succession.

Giles's treatment, therefore, does not contribute to the exegesis nor indeed to the development of Aristotelian dynamics. But on the side of logic and metaphysics, it raises new and interesting problems related to the structure of motion and time.

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## IMPULSUS AND IMPETUS IN THE *LIBER JORDANI DE RATIONE PONDERIS*

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### INTRODUCTION

JORDANUS de Nemore is known mainly for the contribution made by him and his school to the development of statics in the Latin West in the thirteenth century. He is, however, also known as one of the probable forerunners of the theory of impetus,<sup>1</sup> because in book 4 of *De ratione ponderis*, facing various problems of dynamics (effect of the medium on motion, fall of heavy bodies, problems of elasticity, etc.), he uses concepts similar to the ones that Buridan would later develop and organize in his theory.<sup>2</sup> As there is no evidence that Buridan's theory is derived from the Islamic world,<sup>3</sup> some of the most alert scholars of medieval science are

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<sup>1</sup> *The Medieval Science of Weights (Scientia de Ponderibus)*, ed. Ernest A. Moody and Marshall Clagett (Madison, 1952); Marshall Clagett, *The Science of Mechanics in the Middle Ages* (Madison, 1959), translated by Libero Sosio as *La scienza della meccanica nel Medioevo* (Milan, 1972).

<sup>2</sup> On the problems of the attribution of *De ratione ponderis* to Jordanus, see Moody and Clagett, *Medieval Science of Weights*, 18-19, 123, 171-72; and J. E. Brown, "The 'Scientia de Ponderibus' in the Later Middle Ages" (Ph.D. Diss., University of Wisconsin, 1967). Without any further evidence as to the authorship of this treatise, we ascribe it to Jordanus (following Moody).

<sup>3</sup> As is already known, however, there are strong analogies between the concept of *mail* in Islamic authors and the concept of impetus; more information about the theory of *mail* can be found in Clagett, *Science of Mechanics*, 512-14, 547-48.

inclined to think that the theory of impetus is a product of the Latin West.<sup>4</sup> A hypothesis has thus been advanced that attempts to demonstrate some connection between Buridan's theory and the way in which Jordanus uses the word *impulsus* in book 4 of the *De ratione ponderis*.<sup>5</sup>

This study is part of a larger work searching for the constructive procedures of Buridan's impetus theory and for the conceptual perspectives that it opens.<sup>6</sup> Through this research we would like to show how the process by which the theory of impetus was formed can be considered a metaphorical one, in a sense similar to, but more general than, the sense in which Richard Boyd<sup>7</sup> has viewed the role of metaphor in science.<sup>8</sup> As part of the larger investigation, it is necessary to analyze the works of the author of the *De*

<sup>4</sup> Moody and Clagett, *Medieval Science of Weights*; Clagett, *Science of Mechanics*; Anne-liese Maier, *Zwei Grundprobleme der scholastischen Naturphilosophie: Das Problem der intensiven Grösse. Die Impetustheorie*, 2d ed. (Rome, 1951).

<sup>5</sup> Ernest A. Moody (in Moody and Clagett, *Medieval Science of Weights*, 171, 409-10, 412) tends to relate Buridan's concept of impetus and Jordanus's concept of *impulsio*. In Clagett, *Science of Mechanics*, 519 and 551, this relationship is stated with reference to *impulsus*; also, the difficulty of attributing an exact meaning to *impulsus*, owing to Jordanus's lack of interest in the ontological status of the mechanical terms and ideas used in his work, is emphasized there.

<sup>6</sup> E. Giannetto, G. D. Maccarrone, S. Pappalardo, and A. Tinè, "Impetus Theory: A Metaphorical Process in Medieval Science" (in preparation).

<sup>7</sup> Richard Boyd, "Metaphor and Theory Change: What is 'Metaphor' a Metaphor for?" in *Metaphor and Thought*, ed. Andrew Ortony (Cambridge, 1979), 356-408.

<sup>8</sup> The role of analogy and metaphor has been debated in both humanistic and scientific cultures. Some authors completely deny any function to analogy and metaphor in science, banishing them to rhetoric and to literary aesthetics. On the other hand, other authors go to the opposite extreme and give analogy and metaphor the status of fundamental categories of thought and also, therefore, of scientific knowledge. The former can be considered as belonging to a school of thought that has its origin in the "early" Wittgenstein (that is, in the Wittgenstein of *Tractatus logico-philosophicus*) and that looks at analogy and metaphor as "language diseases" or, in a more tolerant perspective, as "heuristic" strategies of language which are present and important only in the delivery context, as conceived by Reichenbach, sharply separated from the context of the legitimation of scientific theories. The latter have also tried to formalize analogy and metaphor—for example, in terms of model theory, the theory of catastrophes, or a theory of abduction—in such a way as to conceive for them a structural role inside formalized scientific theories, and to think it possible to computerize them.

In our opinion analogies are actually the fundamental iconical mechanisms of scientific explanation that individuate the invariant properties of its structures, whereas metaphors characterize its "deformations," reorganizations, and its new creations. Both analogies and metaphors have hermeneutical modelling virtues. In relation to this wide range of problems, the first results of our research on the *Quaestiones super libris quattuor de caelo et mundo* by Buridan have shown us that uses and typologies of analogy and metaphor can be derived, without any epistemological presupposition, from a direct analysis of texts as "laboratory." See E. Giannetto, G. D. Maccarrone, S. Pappalardo, and A. Tinè, "Analogia e metafora nell'opera scientifica di Buridano" in *Atti del VII Congresso Nazionale di Storia della Fisica*, ed. F. Bevilacqua (Milan, 1987), 197-204, and references therein.

*ratione ponderis*, both to clarify which affinities bind his ideas to Buridan's, in relation to the concept of impetus, and to point out which elements of Buridan's explanation of dynamics are fully original and new.

Different positions on the role of impetus theory have been taken; for example, whereas A. Koyré described it as a way without exit, which Galileo had to abandon in his "revolutionary" work,<sup>9</sup> other authors, and in particular Anneliese Maier,<sup>10</sup> recognized that impetus theory anticipates some developments in seventeenth-century mechanics, though with differences and in a different theoretical context. We think this latter position is more convincing: it is not irrelevant that the terminology of impetus theory can be found in the works of seventeenth-century authors, though the same terms often have a different connotation. Indeed, in our opinion, this evidence suggests that the history of impetus theory, both in its initial construction and in its later evolution, must be studied as a long metaphorical process—a particular metaphorical process which illuminates the dynamic connections between different theoretical practices. By means of this particular metaphorical process we can account for the actual variance in meaning in the historical process (beyond the "statical" contraposition between commensurability and incommensurability of theories). Apart from these fundamental questions, our work is, of course, focused on an attempt to clarify Jordanus's ideas by analyzing the concept of impetus, one of the most important concepts in medieval natural philosophy. Among other conclusions we find that there exists a strict relationship between the dynamic and static representations of gravity in Jordanus, with a generalized use of the concept of "effective gravity."

This essay consists of a study of the use of the words *impulsus*, *impulsio*, *impello*, and *impetus* in the *De ratione ponderis*. We shall try to show that the first three terms, which have the same etymological root, connote a concept different from the fourth one. The first three terms always refer to a violent action with an external push; *impetus*, on the other hand, refers to something like an internal property of a body which is connected to the body's ability to push, although it does not necessarily have a violent origin and it fades away when motion ceases. In other words, it is our opinion that *impetus* denotes a physical entity (even though not yet well defined) which can belong to a body to a certain degree, whereas *impulsus* and *impulsio* denote an action (the action of *impellere*), that is, these words are used as in ordinary language. Since Jordanus always uses the words

<sup>9</sup> A. Koyré, *Études galiléennes*, 3 vols. (Paris, 1939), 1:54-73.

<sup>10</sup> Anneliese Maier, "Die naturphilosophische Bedeutung der scholastischen Impetustheorie," *Scholastik* 30 (1955), 321-43; rpt. in vol. 1 of *Ausgehendes Mittelalter: Gesammelte Aufsätze zur Geistesgeschichte des 14. Jahrhunderts* (Rome, 1964), 353-79.

*impetus*, *impulsus*, and *impulsio* in these ways, it is improbable that such a systematic distinction could be casual, and it seems to point out a conscious trend of thought even though we do not maintain that Jordanus applied a definite theory. Our analysis, then, shows that at least this aspect of Jordanus's ideas could have been an important point of reference for Buridan's theory.<sup>11</sup>

As the following analysis will show, however, theorem R4.08<sup>12</sup> and other passages of the *De ratione ponderis* should not be interpreted as indications that Jordanus conceives of the motion of a falling body in a way similar to Buridan (using *impulsus* instead of *impetus*).<sup>13</sup> It is simply improbable that Jordanus would have inverted the traditional Aristotelian causal relationship between motive power and velocity as Buridan does.<sup>14</sup> There

<sup>11</sup> Others authors had also used the term *impetus*: Thierry of Chartres used it in a confused way; Roger Bacon and Albertus Magnus used it either to point to the pushing action of a medium or to refer to an impression left in the medium to which the continuation of violent motion is due. See Maier, *Zwei grundprobleme*, 140-41; and Clagett, *Science of Mechanics*, 515-16. Jordanus, on the other hand, uses the term in connection with everything that moves (perhaps not always violently), even projectiles.

<sup>12</sup> We have used the notation that Moody and Clagett use for the seventeen theorems of *De ratione ponderis*, bk. 4, in *Medieval Science of Weights*, 212-26. Passages of the text quoted below are from this edition (page numbers are cited after each passage).

The text prepared by Moody and Clagett is based on four manuscripts: (1) Paris, Bibliothèque Nationale lat. 8680 A, fols. 5r-9v [7r-11v of pencil foliation] (s. xiii); (2) Oxford, Bodleian Library Auct. F.5.28, fols. 125v-133r (s. xiii); (3) Vatican City, Biblioteca Apostolica Vaticana Reg. 1261, fols. 50r-55v (s. xiv-xv); (4) London, British Library Harley 13, fols. 133v-140r (s. xiii). They also used *Jordani Opusculum de ponderositate*, ed. Nicolò Tartaglia (Venice, 1565) based on Madrid, Biblioteca Nacional 9119, fols. 363v-369r (s. xv).

<sup>13</sup> Moody and Clagett, *Medieval Science of Weights*, 412; Clagett, *Science of Mechanics*, 519. Buridan's exposition of the solution to the problem of the acceleration of a heavy body when falling is found in Johannes Buridanus, *Quaestiones super octo Physicorum libros* 8.12 (Paris, 1509; rpt. as *Kommentar zur Aristotelischen Physik* [Frankfurt-am-M., 1964]), fols. 120r-121r, and in his *Quaestiones super libris quattuor de caelo et mundo* 2.12, ed. Ernest A. Moody (Cambridge, Mass., 1942), 176-81.

<sup>14</sup> It is not entirely appropriate to talk about an inversion of the causal relationship between motive power and velocity even in Buridan, since for him the velocity of a moved body constitutes only the means through which the motor (that continues to be the actual cause) gives *impetus* to it. If a body is self-moving, as in the case of a heavy body, natural gravity acts as the main motor and similarly causes the acquisition of *impetus* by means of the velocity of a moved body: "Et ex istis sequitur, quod necesse est imaginari quod grave a suo motore principali, scilicet a gravitate, non solum acquirit sibi motum, imo etiam acquirit sibi quandam impetum cum illo motu, qui habet virtutem movendi ipsum grave cum gravitate naturali permanente. Et quia ille impetus acquiritur communiter ad motum, ideo quanto est motus velocior, tanto ille impetus est maior et fortior. . . . Et sicut ille impetus acquiritur communiter ad motum, ita communiter minoratur vel deficit, ad minorationem vel defectum ipsius motus" (Buridan, *Quaestiones . . . de caelo et mundo* 2.12). However, we shall continue to talk about the inversion of the Aristotelian causal relationship, understanding by it the conception that sees in the velocity of a body the means of acquiring pushing ability, even if this should actually be given by a motor.

is also some evidence that Jordanus probably did not consider impetus to be a factor in the motion of the same body that possesses it, although the text is ambiguous about this point.<sup>15</sup> This evidence is also important for understanding the factors that led to a developed impetus theory by Buridan, independent of any actual historical relationship between Buridan's work and the *De ratione ponderis*. Indeed, if there were such a relationship between the two, we must look for its origin in a later period and in a set of problems different from those with which Jordanus dealt.

#### ANALYSIS OF THE *DE RATIONE PONDERIS*

In the theorems of book 4 of the *De ratione ponderis* that we wish to analyze, our interest turns to the use of the terms *impulsus*, *impulsio*, *impello*, and *impetus*. We should point out here that these terms do not appear in the other three books of the *De ratione ponderis*, in the *Elementa super demonstrationem ponderum*, or in the *Liber Jordani de ponderibus*.<sup>16</sup> This is due to the special nature of the topics discussed in book 4 of the *De ratione ponderis*.

*Impulsus*, used as a noun, appears four times (in R4.08, R4.12, R4.15, and R4.17), *impulsio* once (in R4.14), and *impetus* four times (in R4.15 and R4.17). Since there does not appear to be any doubt about the use of the term *impello*, we shall not analyze its use in R4.01, R4.06, R4.08, R4.09, R4.10, R4.11, R4.12, R4.13, R4.14, and R4.17 (forty-seven times); we simply point out (as was previously stated concerning *impulsus* and *impulsio*) that this is not a matter of technical use but of ordinary language, as is easily verified from the Latin text.

We are going to consider only the passages that are relevant to our analysis, giving an interpretation which seems correct to us, and our comments will nearly always refer back to our aims. We will also try to emphasize the points where our opinion differs from that of other annotators. For a complete critical examination of the texts, we refer the reader to the comments of Moody and Clagett in their 1952 edition.

<sup>15</sup> In our opinion, it is Jordanus's concept—that impetus is not a factor in the motion of the same body that possesses it—that informs the nonoperated inversion of the Aristotelian causal relationship between motive power and velocity, and also the explanation of the acceleration of falling bodies without the use of the concept of impetus.

<sup>16</sup> Moody thinks that the *Elementa* must be attributed to Jordanus, but not the *Liber de ponderibus*; see Moody and Clagett, *Medieval Science of Weights*, 9, 14-15, 121-23, and 145-48.

## R4.01 OMNE MEDIUM IMPEDIT MOTUM.

Esto quod movetur *ab*; quod vero occurrit medium sit *c*; ponatur *c* quasi in statera, que sit TED. Si igitur *c* nullius fuerit gravitatis, si non impedit motum *ab* descendantis, cum impellatur ab ipso cogetur descendere, et sic erit ut gravitatem habens. Poterit ergo descendens ex parte T aliquod pondus ex parte D attollere; eque ergo constabit *ab* descensu suo impellere *c* et attollere *d*. . . .

Quod si *c* ponderosum fuerit: Si non movetur, quod ipsum impedit habebit et *ab* aliquatenus impedire; si movetur, cum *ab* ipsum consequatur, erit *ab* gravius quo velocius. Sitque *z* equale *ab* in pondere. Possibile igitur est *z*, ex parte T positum, motu *c* descendere et attollere aliquod pondus ex parte D. Fietque tunc *z* in pondere ut *c*. Si igitur *ab* non impeditur impellendo *c*, non impediatur impellendo *z* simul. Ergo, cum moveantur *ab* et *z* motu naturali, non impediuntur in attollendo *d*, quod totum est impossibile. (212)

To summarize, this theorem intends to demonstrate that every medium prevents motion. Jordanus demonstrates the truth of this proposition in the case of a body *ab* descending through an unheavy medium *c*, and then he tries to obtain the same result in the case in which *c* is a heavy medium. He distinguishes two possibilities: (1) *c* does not move and thus what stops *c* does the same to *ab*; (2) *c* does move and therefore it is possible to propose that if there were a heavy body *z* with the same weight as *c* (and with the same property of not stopping the motion of *ab*) on the arm of a balance<sup>17</sup> lifting a counterweight *d*, the natural motion of *ab* would raise *d* without itself being impeded, and this is impossible.

A sentence in this theorem is probably one of those that have caused Jordanus's explanation of why a heavy body falls to be interpreted as an inversion of the Aristotelian causal relationship between motive power and velocity. Such an interpretation attributes to Jordanus the idea that the increase in velocity causes an increase in gravity by the addition of another factor to the natural one. This interpretation is similar to the way Buridan conceived of the role of impetus when tackling this problem. The sentence in question seems to be related to the second possibility (that *c* does move): ". . . si *c* ponderosum fuerit: . . . si movetur, cum *ab* ipsum consequatur, erit *ab* gravius quo velocius." Other annotators have considered *ab* to be the subject of the last clause.<sup>18</sup> Such an interpretation is puzzling because

<sup>17</sup> Here Jordanus uses in the demonstration an "ideal experiment" which again brings the dynamic problem to a known static effect, allowing for a definition of terms independent from the analyzed context.

<sup>18</sup> Moody and Clagett, *Medieval Science of Weights*, 213: ". . . if *c* should be heavy, then . . . if *c* is in motion, then, since *ab* follows after it, *ab* will be heavier to the extent that it is moving faster."

if *ab* is the subject, then the precise function of the phrase between the commas is unclear. And if this interpretation is accepted, we then think that the only way to resolve this uncertainty is to interpret the parenthetical phrase as referring to the mechanism that explains the acceleration of a falling body (as described in R4.06). Furthermore, if this is the case, “erit *ab* gravius quo velocius” should be understood as “*ab* will be heavier since (as is demonstrated by fact) it is faster.” This is in the standard Aristotelian sense which considers the increased gravity as a cause and the increased velocity as an effect.<sup>19</sup> Later on we will explicitly suggest that the meaning of *gravius* should refer to the composition of the various causes of motion, whether natural or violent. Jordanus uses *gravius* or *ponderosius*—and he does so many times—when he has to point out that an object falls towards the ground with an increased velocity, without any regard for the particular circumstances in which it happens (in other words, without discriminating among the various causes that could be the origin of a particular motion). After all, motion is always described in terms of “effective gravity” which a body should have in order to descend with the observed velocity.<sup>20</sup>

As Moody pointed out, when Jordanus deals with problems of statics he uses the concept of “effective gravity” as the effective combination of natural and violent factors; this is the case in *gravitas secundum situm* and *gravitas in descendendo*.<sup>21</sup> This method is also applied to the field of dynamics,<sup>22</sup> and it must be used to explain some occurrences of *gravius* and *ponderosius* in book 4 of the *De ratione ponderis*.<sup>23</sup> Since gravity has

<sup>19</sup> See our comments to R4.06.

<sup>20</sup> If Jordanus’s words are interpreted as indicating an actual variation in the motive power of a heavy body, then what we have called “effective gravity” would only represent such an inner motive power to which is due that particular observed motion; it is another passage of the *Liber de ponderibus* (see Moody and Clagett, *Medieval Science of Weights*, 150) that seems to suggest that things can be understood in this way: “Quod quidem grave descendat, hoc est a natura; sed quod per lineam curvam, hoc est contra naturam, et ideo iste descensus est mixtus ex naturali et violento” (“Indeed, it naturally happens that a heavy body descends; but it is against nature that it does so following a curved line and for this reason such a descent is a mixture of natural and violent motion”). All translations are our own.

<sup>21</sup> Moody and Clagett, *Medieval Science of Weights*, 17–18, 374–75.

<sup>22</sup> This is an interesting process of abstraction, which might have seemed obvious to Jordanus. He uses the concept of “effective gravity” early in his work when describing the behaviour of a heavy body in a static context with a system of constraint. Later, he thinks that the action of the resistance of a medium to the motion of a heavy body is similar to such a system of constraint, and so he also uses the phrase “effective gravity” in relation to the simple falling motion of heavy bodies.

<sup>23</sup> See Moody and Clagett, *Medieval Science of Weights*, 212, line 21 (R4.01); 216, line 96 (R4.06); 217, line 114 (R4.08); 220, line 188 (R4.12); 222, lines 196, 207 (R4.12); 226, line 272 (R4.16).

been understood in the sense of “effective gravity,” Jordanus’s reasoning agrees with that of Aristotle, at least in regard to the causal relationship between motive power and velocity.

We think, however, that there is another way to construe the sentence in question. Let us suppose that the subject of the last clause is *c* instead of *ab*, so that the sentence would have this definite meaning: if *c* moves, since *ab* follows and pushes it, *c* will be heavier (it is falling) than *ab* since it is faster (it precedes *ab* during the motion). The final part of the theorem, although not very clear, refers to such a diversity of weight. In other words, on the basis of this second interpretation, Jordanus’s reasoning would be as follows: since there is no reason for the resistance to the motion of *c* to be different from the resistance to the motion of *ab*, then, if *c* (which has gravity) precedes *ab* on falling (the parenthetical phrase would indicate this), it means that *c* must be heavier. Even in this case *gravius* should be understood in the sense of “effective gravity,” as already specified.

#### R4.04 IN PROFUNDO MAGIS EST DESCENSUS TARDIOR.

Sit profundum ABGD lineis conclusum, et partes per quas fit descensus sint EFK, profundior E; partes collaterales E, B et G. . . . B et G compressa a superioribus nituntur undique evadere; comprimunt ergo E, ita ut si F cederet, exiret in locum superiorem. Unde manifestum est quod non solum sustinet F, sed nititur contra, et eo magis F contra K. Minusque ideo F repelleret K, si in F profunditas terminaretur; tunc enim solidum suppositum sustineret tantum F, et non niteretur contra. Magis igitur, cum impediatur descensus K, in hoc situ quam si minor esset profunditas, impediatur quoque et descensus T magis. (214)

Some passages of this theorem allow us to understand better the concept of pushing in Jordanus. It is stated that a deep layer E of a liquid is compressed not only by the layers above it but also by those beside it; and the latter tend to escape on all sides because they in turn are compressed by the layers above them. If the part F, above E, gives way because E pushes it, E would rise; therefore, E exerts a double action on F: it supports it and pushes against it (“non solum sustinet F, sed nititur contra”). If F were the deeper layer, directly in contact with the solid bottom, then it would be sustained without the solid bottom exerting any pressure (“. . . et non niteretur contra”). In its function of support, E only impedes the motion of F; while, if E pushes F, then E can move F.

While Jordanus uses *nitor* instead of *impello*, it is not clear if he is making any precise distinction between the two terms. He probably uses *nitor* only because the connotation of “stretching upwards” associated with this term fits the specific case he is considering. In this sense the use of *repello* instead



of *nitor* which we encounter in this theorem (“Minusque ideo F repelleret K . . .”), as well as in the following one (“et ab inferioribus repellitur . . .”), could be significant. The situation described by the theorem where *nitor* is used is, however, completely static, while *impello* is always used in relation to bodies in motion, even if, as we shall see, both the bodies involved do not necessarily move: there are some cases in which the action of *impellere* is made by a body that is initially at rest<sup>24</sup> or is undergone by a body that remains at rest.<sup>25</sup>

Jordanus also speaks about support (and not about pushing) in R4.03<sup>26</sup> in connection with a solid body against which another one falls. The difference between the action of support and the action of pushing that emerges from these considerations will be useful when commenting on theorem R4.09.

*R4.05 LATITUDO MAIOR MINUIT GRAVITATEM.*

. . . Similiter et F ab omni superiore gravatur, eoque amplius quanto AG latius. Quanto igitur plus a supra non directe positus gravatur, et a collateralibus comprimitur, et ab inferioribus repellitur, tanto plus nititur contra K; et ideo amplius tardabitur descensus T, et tantum gravitas minuetur. (214-16)

Jordanus reconsiders the physical situation of the previous theorem and claims that the greater the width of a container of liquid the less the gravity of a body T descending through it (“Latitudo maior minuit gravitatem”); the more a portion F of the liquid is burdened by the liquid that is not directly above it, is pressed by the portions on its sides, and is pushed up by the portions below, the more it pushes against those portions that are above it, and therefore, the more it delays the descent of T; and thus the gravity of T is reduced (“. . . et ideo amplius tardabitur descensus T, et tantum gravitas minuetur”).

This is a clear example of the way in which Jordanus also uses his concept of “effective gravity” in the field of dynamics.<sup>27</sup> He considers the real motion

<sup>24</sup> Ibid., 216 (R4.08): “. . . atque plus impellit motum quam sine motu . . .”; and in R4.09, with regard to a static situation, we read “. . . plus ergo impellitur” (218).

<sup>25</sup> Ibid., 218 (R4.10): “Adeo, e contrario, grave, quod virtuti impellentis non cedat vel parum; et ideo modicum movebitur vel nihil” (“On the contrary, it can be so heavy that it does not surrender, or hardly at all, to the *virtus* of what pushes”). Here, the action of “impellere” also has possible static effects beyond the dynamic ones (as in many other cases).

<sup>26</sup> Ibid., p. 214: “R4.03 QUOD MAGIS COHERET, PLUS SUSTINET. Sit quod sustinere habet, ABC, et res descendens T. . . Quo ergo magis coherent, vel plus sustinebunt T ut non moveatur ante separationem suam, vel, si moveatur, plus habet ea secum trahere coniuncta; plus ergo impediunt, et ideo plus sustinebunt.”

<sup>27</sup> See our comments above on theorem R4.01.

of a falling body and talks about gravity not as the natural gravity of a body but as the composition of this property with the resistance to motion.

*R4.06 RES GRAVIS, QUO AMPLIUS DESCENDIT, EO FIT DESCENDENDO VELOCIOR.*

... Res igitur gravis descendens, primo motu trahit posterioria et movet proxima inferiora; et ipsa mota, movent sequentia, ita ut illa mota gravitatem descendantis impediant minus; unde gravius efficitur, et cedentia amplius impellit, ita ut iam non impellantur sed etiam trahant. Sicque fit ut illius gravitas tractu illorum adiuvetur, et motus eorum gravitate ipsius augeatur; unde et velocitatem illius continue multiplicari constat.

This theorem is particularly interesting for its description of the falling motion of a heavy body. The mechanism that allows a heavy body to increase its velocity does not provide any increase in the inner force ascribed to the changed kinematics; the decrease in resistance to the motion of a heavy body by portions of the medium (these portions are moved by the same heavy body) favours the increase in velocity. Furthermore, these portions are also able to drag the heavy body, making it move even faster.

It is interesting to observe that the expression “unde gravius efficitur” states the consequence of the decreased resistance of the medium on the motion of a heavy body and probably refers to the concept of “effective gravity,” already mentioned. Here this concept involves both the gravity peculiar to a body (which naturally tends to make it descend) and a violent factor which offers resistance to natural motion. Furthermore, we do not believe that the description of the cause of acceleration in R4.06 is consistent either with the interpretation that “unde gravius efficitur” involves an increase in gravity determined by an increased velocity (in a sense analogous to Buridan’s theory)<sup>28</sup> or with the traditional interpretation offered by Simplicius (and by Alexander of Aphrodisias) of the Aristotelian explanation of the increase in gravity due to a greater formal perfection.<sup>29</sup> If Jordanus had taken either of these positions, he would have had no need to formulate this theorem. It seems that Jordanus prefers to accept an improbable traction from a medium, moved by the same heavy body, to explain why the acceleration of a falling heavy body persists. As a consequence of the relatively small resistance which a medium is able to offer to the push of

<sup>28</sup> We notice a relevant difference in Buridan, who considers the resistance of the medium to be constant during the fall: “... suppono quod gravitas naturalis ipsius lapidis manet semper eadem et consimilis ante motum et post motum et in motu. ... Suppono etiam quod resistentia quae est ex parte mediū remaneat eadem vel consimilis ...” (Buridan, *Quaestiones ... de caelo et mundo* 2.12, p. 179). His theory can explain the acceleration of a heavy body without introducing this other variable; on the other hand, this is an essential variable for Jordanus.

<sup>29</sup> Clagett, *Science of Mechanics*, 543-45.

a heavy body (as suggested by common experience, at least in the case where the medium is air), the falling velocity should stop increasing if some other factor does not interfere; this is why the dragging action by the medium takes place. Shortly after his description of this traction Jordanus writes, “. . . unde et velocitatem illius continue multiplicari constat” (“. . . it is so evident that its velocity must also increase”), which seems to confirm the concept of velocity as an effect, in accordance with the traditional Aristotelian causal relationship.

Finally, there is another factor that makes us doubt that Jordanus would have thought of the increase in gravity of a body as an effect caused directly by velocity (as in Buridan’s impetus theory), and that is that Jordanus does not use *impetus* to express this concept. As we shall see later, the meaning attributed to this term by Jordanus is in some respects similar to the meaning in Buridan; the four times that *impetus* appears, it is used to denote the property of a moving body to which is due the ability to produce motion, although in a body different from the one that possesses such a property. Therefore, it seems logical to assume that *impetus* is used whenever needed to denote an internal factor of motion, dependent upon velocity, which must be added to natural gravity. This term appears in Jordanus’s work with some attributes similar to these, but not in his explanation of the acceleration of a falling body.

R4.08 OMNE MOTUM PLUS MOVET.

Si quidem ex impulsu moveatur, certum est quod impellere habet. Si autem motu proprie descendat, quo plus movetur, velocius fit, et eo ponderosius; atque plus impellit motum quam sine motu, et quo plus movetur, eo amplius. (216)

This theorem concerns the ability of a body to push because it is in motion; moreover, this ability increases as the velocity of motion increases. Since it has been assumed that in this theorem *impulsus* is used in the same way as *impetus* would be used later by Buridan,<sup>30</sup> we will carefully examine the structure of the theorem.

At the beginning of the second sentence (as quoted above) two situations are distinguished, emphasized by the word *autem*: (1) the case in which a body is moved by *impulsion*, that is, moved with a violent motion because of a received push; (2) the case of natural motion represented by a falling heavy body. The “ex impulsu” is used precisely to specify that in the first case it is violent motion being talked about. Here *impulsus* means the action of pushing, specifying that the motion has been caused by an external motor;

<sup>30</sup> Ibid., 549.

it does not indicate a property possessed by a moving body that in some way causes the motion of this body or its ability to push.

On the other hand, it seems to us that the final “eo amplius,” which others have interpreted as referring to a greater impulsion,<sup>31</sup> must be translated “the more it [pushes]” and be understood in relation to an increase in the velocity of motion. If we understand impulsion as this action of pushing, we produce a coincidence of meaning between our translation and the other; but if this is so, impulsion is rather different here from Buridan’s *impetus*. As in the first case, *impulsus* denotes the action of pushing which a body either receives from outside or which it exerts on another, and not a force (internal or external) responsible for the motion of a body. In Buridan’s theory it is possible to establish only the following causal relations between impetus and impulsion: the greater the *impetus* of a body, the greater the push that it can exert on another; or vice versa, the greater the push that a body receives from another, the greater the *impetus* that it acquires. Whereas Buridan’s *impetus* is a quality of the body,<sup>32</sup> Jordanus’s *impulsus* is an action.

Besides, in light of the comments on theorem R4.06 where the mechanism that determines the acceleration of a falling heavy body is presented, it seems improbable, in connection with such a problem, that Jordanus wanted to overturn the traditional Aristotelian causal relationship between motive power and velocity.<sup>33</sup> If we want to argue that Jordanus has affirmed the inversion of this causal relationship, it is first necessary to establish whether he thought that a pushing force is caused by the velocity of a moving body. We will analyze the text and try to find a solution to this.

The explanation of the falling motion presented in R4.06 brings to the natural interpretation of “Si autem motu proprie descendat, quo plus movetur, velocius fit, et eo ponderosius . . .” (“If, instead, it descends with a natural motion, the more it moves the more it becomes faster and heavier . . .”) the sense that the increase in “effective gravity” is due to the decrease in the resistance of the medium, which determines the acceleration of motion. On the other hand, the next statement, “. . . atque plus impellit motum quam sine motu . . .” (“. . . and it pushes more in motion than when it does not move . . .”), is justifiable in an explanation which conserves the Aristotelian causal relationship,<sup>34</sup> and in which “effective gravity” is derived

<sup>31</sup> Ibid.

<sup>32</sup> Buridan, *Quaestiones . . . de caelo et mundo* 3.2, pp. 240–43.

<sup>33</sup> Moody has a different opinion; see Moody and Clagett, *Medieval Science of Weights*, 408.

<sup>34</sup> We are reminded of Aristotle’s explanation of the continuation of violent motion because of the action of the medium: air does not usually move but it is able to do so if it is set in motion, and the more it moves the faster is its motion (this depends on the power

from the connected relationship of resistance and gravity peculiar to the body. The increase of “effective gravity” (“... et eo ponderosius...”) would cause a greater push; also, if an increased ability to move must correspond to a more powerful motor, it is necessary to admit that the resistance to motion actually weakens the force of the motor.<sup>35</sup> Yet even if Jordanus does not explicitly express himself on this point, the increased ability to push can be connected to the possession of more *impetus*, as we will see when we examine the meaning attributed to this term. Nevertheless, having more *impetus*, which depends on the velocity of a body, does not explain the fact that the body becomes *ponderosius*, since it does not seem that Jordanus means by the word *impetus* a factor causing the motion of the same body in which it resides. We shall return to this point at the end of our analysis.

We also notice that “certum est” (after the first comma) probably points to what is already known from Aristotelian physics with regard to violent motion: if something moves “ex impulsu” it is certain that it must *impellere*. This is confirmed in R4.17: “Si vero B posterius impellatur, et precedat A, impulsu quidem B impellet A . . .” (“If, however, B is pushed from the rear, and A is in front, on being pushed B pushes A too . . .”); “the more it moves, the more it pushes” has indeed an exact theoretical collocation within the explanation of violent motion according to Aristotle,<sup>36</sup> but why does a heavy body have to do the same? Jordanus’s answer is laconic and refers (on the basis of R4.06) to the greater ponderousness which comes from the decrease in resistance and is the cause (and not the effect) of the increase in velocity.

In order to examine a body’s ability to push, Jordanus seems to pay attention to the cause of a body’s motion, distinguishing the violent case from the natural one; nevertheless, the conclusion reached is generally valid: “omne motum plus movet.” The aim of this theorem seems to be to affirm some “standard” results of Aristotelian physics for violent motion in the case of natural motion. This operation must not be considered problematic for Jordanus in light of the conciseness of the arguments: although he seems

of the main motor); the greater the power of the main motor, the faster this power moves the contiguous stratum of air and the more motive power it gives to the air; such a motive power is decreasing little by little in the following strata, so that they are able to move less and less (and also more slowly) because the power of the preceding air stratum becomes smaller and smaller (see *Physics*, 8.10 [267a2-13]). Therefore, the fact that a moved body is more able to push than a motionless one, and the more it does so the greater is its velocity, is not alien to Aristotelian explanation. Jordanus asserts the same thing, but in relation to the case of natural falling motion.

<sup>35</sup> See note 20.

<sup>36</sup> See note 34.

to wonder why a body in motion is able to push, and why the more it pushes the faster it moves, he does not linger over such an important problem. Instead, he simply seems to take account of an empirically evident fact and only tries to refer to an accepted theoretical explanation. One would expect that he would have approached this problem in a different way and dedicated more attention to it if he had wanted to invert the Aristotelian causal relationship between motive power and velocity.

Therefore, although it is clearly accepted that there is a correlation between the ability of a moving object to push and its velocity, it is not clear that the reason for this is fundamentally different (in a causal sense) from what is implicit in the Aristotelian explanation in regard to both the violent and natural motion of heavy bodies.

*R4.09 QUOD MOTUM PLUS IMPEDIT, PLUS IMPELLITUR.*

Sit quod movetur *a*, et quod plus impedit *c*, et quod minus *b*. Sitque libra DEF, duoque pondera *z* et *t*. Sitque *a* quasi in D suspensum; atque *z* ab F dependens, cum *c*, impediat omnino motum *a*; et *t*, cum *b*. Patet ergo quod est *t* quam *z* magis sustinens. . . . Plus ergo gravatur *c* pondere *a*, quam *b*; plus ergo impellitur. (218)

This theorem states that "the more something obstructs motion, the more it is pushed." In spite of the fact that Jordanus starts with "Sit quod movetur *a* . . .," he seems to refer next to a motionless situation, as indicated by ". . . atque *z* ab F dependens, cum *c*, impediat omnino motum *a*" (" . . . and *z*, hanging from F, together with *c*, obstructs completely *a*'s motion"). Indeed the idea is as follows: a weight *a* descends through a medium *c* which resists. If, at a certain moment, one imagines linking *a* to one of the hands of a balance, one could put a counterbalance on the other side so that the action of this, together with the resistance of the medium, exactly counterbalances *a*'s weight. It is obvious that the more the medium resists *a*'s motion a lesser counterbalance is required and, therefore, the medium sustains *a* to a greater level and is burdened by it even more; consequently, the push that the medium receives from *a* is greater.

At this point one might wonder why *c* receives an increased push, or rather why the motive power that is responsible for the pushing action is greater. We notice that the theorem seems to pertain to any body passing through a medium, and that the pushing power of a definite body can only depend on this body's gravity and velocity. Here some difficulties arise in the interpretation that the pushing power depends on the velocity as well as in the possibility that Jordanus is referring to "effective power" in the sense already specified. Let us consider the example of two identical heavy bodies that fall through two different mediums; if the resistance of the second

medium is greater than the resistance to the first, then with both the interpretations we should have less pushing power in the body falling through the second medium because (1) the velocity of the heavy body is less, and (2) the “effective power” is less.<sup>37</sup> However, Jordanus does not consider this problem but simply observes a rather evident fact—not the only time he does this. In this case he observes that to halt a body that passes through a medium that offers a great resistance, all that is necessary is a force that is less than the force required when the resistance of the medium is not as great. This is suggested by the common experience of an object that falls first in water and then through air.

We can still draw some conclusions by relating this theorem to R4.02.<sup>38</sup> In the latter it is stated that the heavier the medium the greater the resistance to the motion of a body that passes through it. So, when considering this and R4.09, we can conclude that the medium is pushed even more. From R4.02 we also know that the motion in a heavy medium is slower than in a light one; finally, the push on the heavy medium is greater than on the light medium but the motion of the heavy medium is less. What we want to point out is that the push is not strictly connected to velocity and hence it is different from impetus.

Besides what we have already said, the theoretical interest in theorem R4.09 is also due to the occurrence, even though vaguely, of the idea that action and reaction are “commensurate.”<sup>39</sup> In regard to this, it seems interesting to note that what has been stated in R4.04—where there is clearly proposed a distinction between a supporting action and a pushing action (see the comments there)—allows us to conclude that the medium exerts, in the case in question, only the first of these two actions. The heavy body pushes the medium which reacts, but this reaction is qualitatively different from the action of the heavy body.

<sup>37</sup> Jordanus seems to consider, at least vaguely, something different from pushing power which we are going to call efficacy of the push (not to be mistaken for “effective power”); it is this that is greater when the moved body is more able to prevent the motion of what moves it. (As already noted, the “effective power” is, on the contrary, less.)

<sup>38</sup> Moody and Clagett, *Medieval Science of Weights*, 212-14: “R4.02 QUO PONDEROSIUS EST PER QUOD FIT TRANSITUS, EO IN TRANSEUNDO DIFFICILIOR FIT DESCENSUS. . . . Quod igitur ponderosius est, ipsum sit ABC; quod levius sit DEF; quod autem transit, T, transiens autem per illa offendat in B et E. Est autem B gravius quam E; cumque a descensu impediuntur et ipsa, quoniam cum descendere habeant stant, pluris est gravitatis quod impedit B quam quod impedit E. Et quia T eodem habet offendi impedimento, plus offendetur in B. Similiter infra B et E equaliter, si sursum pellatur, tardioris erit motus in B.”

<sup>39</sup> Ibid., 408.

R4.10 ET GRAVITAS REI MOTE, ET LEVITAS, FRUSTRARE VIDETUR MOVENTIS VIRTUTEM.

Sit movens AB, et quod movetur C. Adeo ergo leve potest esse C respectu virtutis AB, ut eam non impediat; et ita vix impelletur. Adeo, e contrario, grave, quod virtuti impellentis non cedat vel parum; et ideo modicum movebitur vel nihil. Utrobique ergo videtur frustrata virtus impellentis, quia non confert ad motum rei impulse, vel parum. (218)

Jordanus now reconsiders what was stated in the previous theorem, this time with regard to a very light body which receives a push; its lightness causes it to resist slightly and consequently it is hardly pushed at all. In Jordanus's opinion the initial push is sufficient to explain the subsequent motion of a light body: if the push had been more powerful, a greater motion (in duration or length) would follow. He does not consider what happens after the push. Furthermore, he does not talk explicitly about the quantity of matter in a pushed body, although this quantity, by means of its degree of lightness, interferes indirectly and contingently with the ability of a body to offer an impediment to the motion of that which pushes. The difference between this and Buridan's way of thinking about impetus is evident.<sup>40</sup> Indeed, for Buridan, a light body moves slightly after being pushed for two reasons: first, because, as it is formed by a small quantity of matter, it acquires only a little impetus, and second, because this impetus is consumed rapidly, owing to the resistance of the medium and to the possible contrary inclications of the body.<sup>41</sup>

In previous considerations we have tried to point out that Jordanus probably did not have the concept of impetus in the sense of an internal property responsible for the motion of a body that possesses it; the situation in this theorem would have been particularly suitable for the use of such a concept. This is the same remark we made when commenting on R4.06 with regard to the falling motion of a heavy body and, as we said then, we will offer a more complete definition of the meaning Jordanus gives to *impetus* later.<sup>42</sup>

Finally, we note that in the case where the pushed body is very heavy, it is not moved or is only slightly moved, and this is because it does not surrender to the pushing power; hence, there can be a push without motion.

<sup>40</sup> With regard to the problems raised in this theorem, Moody has emphasized the fact that there was a certain historical continuity stretching towards Buridan; see Moody and Clagett, *Medieval Science of Weights*, 409.

<sup>41</sup> See Buridan, *Quaestiones super octo Physicorum libros* 8.12.

<sup>42</sup> See our comments to R4.15 and R4.17, and the concluding section of this paper.



*R4.11* VIRTUTEM IMPELLENTIS ADIUVAT CIRCUMACTIO IPSIUS, EO AMPLIUS QUO FUERIT LONGIUS.

Sit quod movet ABC, et motum est E. Si igitur ABC impellat E in C, et moveatur A, minus impellet quam si figatur A; ponderosius enim est C in situ equalitatis, quam si demittatur A, ut ostensum est. Manente item A, plus impelletur E in C, quam in B; quia gravius in C.

Item, circumactum C, manente A, plus impellet quam utrobique prius non moto; quia motum plus, eo etiam magis quo longius, dupliciter. Fixo enim A in centro, circumacta B et C, describent arcus circulorum, et maiorem C. Cum ergo maius pondus in C quam in B, et velocius quoque motum, multo amplius impelletur E in C, quam in B. . . .

Si item centrum alterius motus sit in B, ut CBA circa A, et item CB moveatur circa B, augmentabitur virtus impellendi pro duplici motu. . . . (218-20)

*Ponderosius* and *gravius* also appear here in connection with the concept of *gravitas secundum situm*: “. . . ponderosius enim est C in situ equalitatis”; “Manente item A, plus impelletur E in C, quam in B; quia gravius in C”;<sup>43</sup> “Cum ergo maius pondus in C quam in B.”

In this theorem it does not seem possible that Jordanus considers an increase in the gravity of a body to be a consequence of the possession of a certain velocity;<sup>44</sup> it is the *virtus impellendi* that increases because of the velocity of the object which pushes.<sup>45</sup> Any possible connection with the concept of impetus in Buridan is, therefore, to be understood in the limited sense which we mentioned in our comments to R4.08 (and which we have still to discuss in detail). It is clear that Jordanus uses the term to refer to the ability of a body to push something else, but he does not seem to attribute to the term the meaning of an internal force that contributes to the motion of the body that possesses it.

It is also important to point out that “to push more” is not the same as “[to] give more impulsion,”<sup>46</sup> if we consider impulsion as a quality of the body. In the first case, one is talking about something which only happens

<sup>43</sup> It can be understood in this case that Jordanus is referring to a motionless situation by the phrase of the text immediately following: “Item, circumactum C, manente A, plus impellet *quam utrobique prius non moto* . . .” (“Again, if A is fixed and C goes all round it, it pushes more than in both the previous cases in which it has not been moved . . .”; italics added).

<sup>44</sup> For a different opinion, see Moody and Clagett, *Medieval Science of Weights*, 409.

<sup>45</sup> “Cum ergo maius pondus in C quam in B, et velocius quoque motum, multo amplius impelletur E in C, quam in B” (“As the weight is greater in C than in B, and [as C] moves itself faster too, E will be pushed much more in C than in B”); and again, “. . . augmentabitur virtus impellendi pro duplici motu . . .” (“. . . [C’s] pushing force will be increased owing to a double motion . . .”).

<sup>46</sup> Moody and Clagett, *Medieval Science of Weights*, 219.

during the contact between the motor and what is moved (considered separate in different bodies); in the second case, on the contrary, “impulsion” is understood in the sense of Buridan’s *impetus*, that is, as something that can be present in the pushed body even after the termination of the pushing action.

*R4.12 QUOD SUSTENTATUR IN TERMINIS, CIRCA MEDIUM CITIUS DEPRIMITUR, ET EO AMPLIUS SI IMPELLATUR, ET HOC SECUNDUM FORMAM IMPELLENTIS ET QUANTITATEM IPSIUS FIT PLUS ET MINUS.*

Sit quod impellatur ABC. Ipsum ergo si sustineatur in A et C, plus habebit deprimi circa B; nihil enim sustinet B nisi continuitas ad alia. . . . Et ex quo incepit descendere, B fit magis ponderosum, quoniam minus incipit esse pondus in A et C. Porro, quanto B magis distat a terminis, magis ponderabit, quia ipsa sunt ut centra libre, quoniam sustentantur pre longitudine; ergo contingit aggravari medium, ut rumpatur antequam dirigatur.

Hec autem magis contingunt ubi etiam B impellitur; sicque duplicato pondere, citius directio continuitatis B cum A et C solvitur. . . . Atqui hoc etiam ut, cum soliditas continuitatis et ponderi et impulsui non cedat, si que sustinent aliquatenus cedant prosequente eo quod impellit, solvatur; quoniam medium semper fit gravius. Hoc etiam fit, si in neutro termino sustineatur. Fit etiam si in altero, ut in A, quoniam si impellatur in B, quoniam gravius fiet B, non sequetur C circumvolutionem B, et rumpetur continuitas; alioquin plus transiret C quam B; cum sit levius, esset minima soliditas in CA.

In this theorem (in which a bar ABC is held up at its ends, A and C, and is pushed at its central point, B) it is affirmed that a body becomes heavier, not only in the sense of *gravitas secundum situm*, but also when it is pushed: “Hec autem magis contingunt ubi etiam B impellitur; sicque *duplicato pondere* . . .” (“All this occurs in a greater degree if B is pushed; and so the weight is doubled . . .”; italics added). Once again the meaning is that of “effective gravity,” as we have already specified: a (violent) external push combines with the natural gravity of a body.

What Jordanus wrote, however, does not in our opinion justify the interpretation that the increase of gravity which he is talking about is the effect of an increase in the *impetus* of a body.<sup>47</sup> The term *impetus* is not explicitly used, and this—as we have pointed out elsewhere—is important, considering the fact that *impulsus* (used in this theorem) is different from *impetus*, which is the point we are attempting to establish in this general analysis of the *De ratione ponderis*. It is not even certain that velocity (which also implies *impetus* in Jordanus, as we will see) plays a role in this theorem (which, moreover, has some obscure points). What becomes heavier is the

<sup>47</sup> Ibid., 410. Note that Moody speaks of *impetus* and *impulsio* as synonyms.

middle part of the bar (supported at its ends). Apart from the weight, the critical variable that determines the extent to which the bar bends is the intensity of the push exerted from outside on the central part of the bar, which is due to *virtus impellendi*; the greater this *virtus*, the heavier the central part of the bar. Furthermore, in this theorem Jordanus specifies (in the passage quoted above) the way in which “*duplicato pondere*” is to be understood. We think that the factor responsible for the increase in weight is the push: “*Atqui hoc etiam ut, cum soliditas continuitatis et ponderi et impulsui non cedat . . .*” (“And besides there is also the fact that, although *soliditas continuitatis* does not surrender to weight and impulsion . . .”; italics added in the Latin version). The term *impulsus* is clearly used here to denote the push suffered by the bar and does not denote *impetus*. (Remember that the bar in this particular case is supported at its ends.)

*R4.14 MAGIS IMPULSUM PLUS COHERET.*

Hec impulsio a posterioribus fit, que impulsa habent anteriora propellere que, quoniam pondere suo aliquatenus resistunt, habent media constringi. Unde quandoque in latus dissipantur. Hinc etiam contingit quod inferiora superioribus infixa, illis depulsis, plus infiguntur.

Here it appears that the term *impulsio* means the same as *impulsus*, that is, it denotes the action of pushing, specifically “a posterioribus fit.”

Another interpretation in which *impulsio* is identified with *impetus*, and in which *impulsio* is something that is produced,<sup>48</sup> seems to us to be more artificial. What is produced in the situation described by this theorem is *impetus* in the pushed parts, but this production of *impetus* is a consequence of the action of *impellere* and is not identified with this action. This conclusion will be more evident in the light of what can be deduced from the following theorem.

*R4.15 QUOD PARTES HABET COHERENTES, SI MOTU DIRECTE OFFENDATUR, REDIT DIRECTE.*

Hoc fieri habet et propter medium in quo defertur, sive aer sive aqua, et propter partium raritatem. Sit in quo defertur B, et motum A; in quo offendit, C. Quia ergo A movet B cum recedat A de loco suo et impellat B de loco suo, oportet ut ad supplendum loca posteriora, reciprocetur B; unde eodem impulsu et promovetur et retorquetur. Eo amplius, cum offendat A in C, cumque nequeat procedere, pondere imminentis constrictum, ponderosius referatur; et cum impetus A refractus sit in C, et pondere solo iam innitatur, habet retrahi motu B nisi pondus eius prevaleat; et directe, quia in omnes partes

<sup>48</sup> Ibid., 225, 410.

equaliter recedit B. Raritas vero partium hoc idem operatur, quoniam priores partes A, cum prius offendantur in C, urgentur mole et impetu posteriorum, et cedunt in se; sicque, deluso impetu, redeunt in locum suum alias repellunt recedendo. Si separabiles sunt partes constrictae, hinc inde resiliunt. (224)

This is a particularly interesting theorem because in it Jordanus uses *impetus* three times. The ontological connotations that Jordanus attributes to this term immediately appear to be different from those of *impulsus*. In all three occurrences—twice explicitly and the third time implicitly—*impetus* is something that is possessed by a body: (1) “et cum impetus A refractus sit in C . . .”; (2) “. . . urgentur mole et impetu posteriorum . . .”; (3) “sicque, deluso impetu . . .” (the reference is always made to the *impetus* of the rear parts of the body A). Simply being in motion seems to be a sufficient condition for a body to have *impetus*: as stressed in the text, when an obstacle C prevents the continuation of the motion of a falling body A, and when A’s rear parts cease to continue pushing the front parts, then *impetus* ends. Therefore *impetus* is something that can be found in a body to a greater or lesser degree according to the velocity of motion. The way in which a body has acquired that velocity, that is, whether it is due to violent action or to the tendency of a body to go towards its own place, appears irrelevant. Although Jordanus probably imagines that the body A is falling, as “. . . et pondere solo iam innitatur . . .” shows, the context seems to justify the validity of the conclusions in other situations as well, for instance in the case of a hurled body bumping against an obstacle.

We would argue that “ponderosius” (“. . . pondere imminentis constrictum, ponderosius refertur . . .”) should probably read “impetuosius” as in two manuscripts (Oxford, Bodleian Library Auct. F.5.28, and London, British Library Harley 13).<sup>49</sup> Indeed, the term refers to B, that is, the part of the medium pushed by A during its motion. When A meets an obstacle C, B cannot proceed further and is further burdened by A and more effectively pushed by A.<sup>50</sup> Consequently it goes back (according to the mechanism described a few lines later in the text) with more *impetus*. On the basis of this interpretation, *impetus* is produced in a violent way in proportion to the power of the external motor and to the efficacy of the push.

We note that *impetus* denotes the pushing ability of a moving body: in (1) it is pushing with its weight alone (A rests on—pushes—C since it no longer has any *impetus*; otherwise *impetus* would continue to push C); in (2) the front parts of A are also pushed by the *impetus* of the rear parts;

<sup>49</sup> Ibid., 336 (variant for p. 224, line 257).

<sup>50</sup> On the basis of theorem R4.09, in such a situation B prevents motion more than A, which consequently pushes it more.

in (3) it is clear that Jordanus, by “deluso impetu,” is referring to the cessation of the pushing action that follows the fading away of *impetus*. As well, there is nothing to lead us to think that Jordanus attributes to *impetus* the ability of being the motor of the same body that possesses it.

Also in the theorem the term *impulsus* appears once with the ordinary meaning of an external pushing action: “. . . unde eodem impulsu et promovetur et retorquetur” (“. . . therefore with the same impulse [B] is induced to proceed and to recede”).

*R4.16* LIQUIDUM ALIQUOD, QUO AMPLIUS CONTINUE DEMISSUM DESCENDIT, TANTUM IN PRIORI PARTE STRICTIUS EFFICIETUR.

Exitus per quod egreditur AB; et prima pars C, que cum descenderit ad DF, sit E in exitu. Item, cum E fuerit in DF, fit C in ZT. Quia ergo, quo plus descenderit ponderosius erit, erit C ponderosius in DF quam in AB; ergo ponderosius in DF, quam E in AB. Quia vero dum E pervenit in DF, pertingit C in ZT, longius erit FZ quam AF, quare gracilius. Itaque semper gracilius continue, quia priores partes velociores; et sic tandem abrumpuntur. (224-26)

It has been suggested that this theorem uses the principle that a greater velocity causes an increase in the gravity of a falling body.<sup>51</sup> Jordanus's words do not emphasize this; he writes only that the more a heavy body falls (the longer the time or the greater the distance) the more it becomes heavy (“. . . quo plus descenderit ponderosius erit . . .”). Why this happens is never explicitly stated except in R4.06, where our interpretation of the meaning of the text is maintained. We have already discussed this point.

*R4.17* SI RES INEQUALIS PONDERIS IN PARTEM QUAMCUMQUE IMPELLATUR, PARS GRAVIOR PRIORA OCCUPABIT.

Sit quod impellitur AB, pars gravior A. Si ergo impellatur ex parte A, et B impellatur; quoniam levius est, facilius cedit impulsui, cumque facilitatem eius non sequatur A, frustrabitur quidem in se et gravitatem A adiuvabit; sicque totus nisus revertetur ad A. Habet ergo precedere, et suo impetu trahere B. Si vero B posterius impellatur, et precedat A, impulsus quidem B impellet A levitasque B tardabitur in movendo A; et ideo plus impelletur A quia motum plus impedit; totoque conatu impulsus habebit trahere B. (226)

Jordanus still talks of *impetus* (“Habet ergo precedere, et suo impetu trahere B”; “So it must precede and drag B with its impulse”), attributing to the body that possesses it the ability of dragging another one.<sup>52</sup> The

<sup>51</sup> Moody and Claggett, *Medieval Science of Weights*, 412.

<sup>52</sup> According to Aristotle, everything moved by something else can be moved in four different ways, but it is possible to reduce them to traction and push; *Physics* 7.2 (243a14-244a7).

situation described by this theorem is related to violent motion and confirms the fact that to be provided with *impetus* it is enough that a body be in motion, no matter whether the origin of such motion is natural or violent.<sup>53</sup>

*Impulsus* is also used once as a noun (“... quoniam levius est, facilius cedit impulsui ...”; “... since it is lighter, it will more easily surrender to the push ...”) and, as always, denotes an action of external pushing. For this reason we should also note this time the conceptual difference between *impetus* and *impulsus* which is found throughout *De ratione ponderis*.

#### THE CONCEPT OF *IMPETUS* IN JORDANUS

This analysis of the *De ratione ponderis* has singled out the following definite characteristics of Jordanus's *impetus*: (1) it is something that a body can possess; (2) a sufficient condition to be endowed with *impetus* is to be in motion; (3) it can be present in a body to a greater or smaller degree depending on the velocity of motion, and it fades away as motion ceases; (4) the possession of *impetus* gives a body the ability of pushing and dragging. These properties differentiate *impetus* from *impulsus*. As for the latter, we can say the following: (1) *impulsus* refers to the action of an external push and not to something that a body can possess; (2) the push can be exerted by a moving body,<sup>54</sup> a supported body either in motion or not in motion,<sup>55</sup> and, probably, by a motionless object that is in turn pushed;<sup>56</sup> (3) the push

<sup>53</sup> See our comment to R4.15.

<sup>54</sup> A clear dependence of the pushing force on velocity is expressed, for instance, in the following passages: “... atque plus impellit motum quam sine motu, et quo plus movetur, eo amplius” (R4.08, p. 216); “Si item centrum alterius motus sit in B, ut CBA circa A, et item CB moveatur circa B, augmentabitur virtus impellendi pro duplici motu ...” (R4.11, p. 220).

<sup>55</sup> As a first example, we may cite the same passage quoted in note 54 (“Si autem motu proprie descendat ... plus impellit motum quam sine motu ...” R4.08, p. 216); as a second example, in a situation in which “... z ... , cum c, impediat omnino motum a,” it is affirmed that “Plus ergo gravatur c pondere a ... plus ergo impellitur” (R4.09, p. 218).

<sup>56</sup> In this case the doubt arises because in the particular examples *nitor* is used instead of *impello* and we do not know whether or not Jordanus distinguishes the two concepts (see our comments to theorem R4.04). There are two passages in which E, F, and K are motionless and superimposed parts of a liquid: “Unde manifestum est quod [E] non sulum sustinet F, sed nititur contra, et eo magis F contra K” (R4.04, p. 214); and “Quanto igitur plus ... ab inferioribus repellitur, tanto plus [F] nititur contra K” (R4.05, p. 216). With regard to this doubt, we can add that in R4.15 *innitor* is used in relation to a heavy body A that, as a result of being motionless, leans on an obstacle C (“... et cum impetus A refractus sit in C, et pondere solo iam innitatur ...”; p. 224); although the situation does not show the body A in motion (as in the other times in which *nitor* is used), the examples reported in note 55 seem to suggest that Jordanus could have used *impello* in an equivalent way.

does not necessarily cause the motion of the pushed object;<sup>57</sup> (4) the pushing action (*impulsus*) is different from the action of support.<sup>58</sup> These characteristics of *impulsus* and the ambiguous fact that *repello* replaces *nitor* in R4.04 and R4.05<sup>59</sup> compel us to think that *impulsus* is used in a rather common sense, in the same way that it is used in ordinary language.<sup>60</sup>

The concept of *impetus*, however, appears much better defined and can be used in a “technical” way (in Jordanus’s time at least) in the scientific description of nature. Furthermore, we note that a body can perhaps have *impetus* even when it does not exert any push. This seems to be apparent in theorem R4.15, where we have proposed that “impetuosius” should be substituted for “ponderosius” in the published text. The modified text describes what happens to a part B of the medium that is pushed by a falling heavy object A when the latter meets an obstacle C: “. . . cum offendat A in C, cumque nequeat procedere, pondere imminentis constrictum, impetuosius refertur. . . .” We cannot, however, completely exclude the possibility that *impetuosius* does not really indicate B’s situation after the push but instead indicates the way in which such a push has acted upon B.

At the bottom of the possible confusion between *impetus* and *impulsus* can be found the fact that Jordanus uses *impetus* (except perhaps in the previously mentioned case of R4.15) in situations in which a body acts upon another body, pushing or pulling it, that is, in the same context in which *impulsus* and *impulsio* appears, although, as we have said, *impetus* does not indicate the act of *impellere* or *trahere* but denotes the cause of the ability to do such actions. In our analysis we have said that Jordanus does not seem to have thought of *impetus* as causing the motion of the body in which it resides, thus maintaining the fundamental distinction and separation between the motor and the moved body which is present in Aristotle’s physics.<sup>61</sup> This consideration is supported by the fact that he has

<sup>57</sup> In the static situation described in theorems R4.04 and R4.05 and recalled in note 56, in relation to the parts E, F and K of the liquid, we read “Minusque ideo F repelleret K . . .” (R4.04, p. 214) and “. . . et [F] ab inferioribus repellitur . . .” (R4.05, p. 216). See also R4.10: “. . . ergo videtur frustrata virtus impellentis, quia non confert ad motum rei impulse, vel parum” (218).

<sup>58</sup> See our comments to R4.04.

<sup>59</sup> See our comments to R4.04.

<sup>60</sup> Jordanus’s concept of push almost corresponds to Aristotle’s, but Aristotle is more careful about defining push as a movement produced by another body in which either the motor accompanies the motion of what is moved or breaks off from it, repelling it (see *Physics* 7.2 [243a19-20]). The cases in which the push does not produce motion would seem to be excluded by Aristotle, but they are included by Jordanus.

<sup>61</sup> *Physics* 7.1 (241b24-242a20); 8.5 (257b2-14). For the relationship between moving and moved bodies and the role of Buridan’s *impetus* as a “medium,” see Giannetto et al., “Analogia e metafora.”

not used *impetus* (not even the concept) where the described physical situation would have clearly required it such as in both R4.10 and R4.06. In the former, the quick cessation of the motion of a pushed light body is connected only with the efficacy of the push without any reference to what happens during the subsequent motion of this body. In R4.06, the idea of adding a factor of internal motion to natural gravity to explain the increase in velocity is completely absent. If Jordanus had allowed *impetus* to have this property (of being a factor of internal motion), then, in combination with the other properties of *impetus* which we have identified,<sup>62</sup> he would have been able to offer a better description of the motion of a falling heavy body than the one he in fact does offer. And it seems improbable that Jordanus would have ignored such a possibility in the formulation of theorem R4.06.

Furthermore, our analysis of the texts have stressed that where others have thought that Jordanus's position on the explanation of falling acceleration is similar to Buridan's,<sup>63</sup> we think it possible to advance arguments in favour of an alternative interpretation based on the concept of "effective gravity," which Jordanus has widely used in the field of statics and has transferred to the field of dynamics. Jordanus understood "effective gravity" as the composition of the natural and violent factors that cause the actual motion of a heavy body in a particular physical situation, although it is not clear whether Jordanus thought it was the actual gravity of a body in such a situation.

In our opinion, the interpretation of Jordanus that maintains that he inverted the traditional Aristotelian causal relationship between motive power and the velocity of motion (as in Buridan's theory of *impetus*) is not convincing in the case of the natural motion of a falling heavy body. We have already explained why this is the case. Doubts remain about the violent motion of projectiles, owing to a variety of possible interpretations of the text which are often the result of an inadequate theoretical treatment. It is, however, plausible to think that some later medieval authors, having read what was written by Jordanus, used his ideas to conceive that a pushing force is originated inside a body in motion by the motion itself, although this does not seem to be Jordanus's own intention.

<sup>62</sup> The different concept of *impulsus* does not lend itself to such a purpose.

<sup>63</sup> See our comments to R4.01, R4.08, R4.11, R4.12, and R4.16.



## VIRGIL'S *ECLOGUES*, NICHOLAS TREVET, AND THE HARMONY OF THE SPHERES<sup>1</sup>

Mary Louise Lord

VIRGIL would no doubt have been startled could he have heard his lines expounded in a fourteenth-century lecture hall. All kinds of hidden meanings would be confidently set forth that could hardly have crossed the poet's mind. It is not that the commentator made up his interpretation out of whole cloth, but rather that layer upon layer of exegesis had accumulated during the many centuries that had intervened since Rome's Augustan Age. The poetry endured, but it was viewed in the light of a new religion and of changing philosophies.

Why, then, should a twentieth-century reader, often through a vexing palaeographical barrier, explore what the medieval commentator had to say about a favorite classical author? The reasons are manifold and cogent if one wishes to trace the vicissitudes of literary criticism, the unfolding development of education, the mind-set of another age, and the gradual progress of humanistic inquiry. The early fourteenth-century commentary on Virgil's *Eclogues* examined in the present study is richly rewarding for what it reveals of these vital considerations.

In 1984 Aires Augusto Nascimento and José Manuel Díaz de Bustamante published an edition of a commentary on Virgil's *Eclogues* which they attributed to the English Dominican friar, Nicholas Trevet (b. 1258-68, d.

<sup>1</sup> This study derives in part from my work on the article on Virgil for the *Catalogus translationum et commentariorum*. Grateful acknowledgment is made of help provided by grants from The American Philosophical Society, the Research Division of the National Endowment for the Humanities, and the Connecticut College Fund to aid the research of emeriti faculty.

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## ELIDUC AND THE ICONOGRAPHY OF LOVE

Sharon Coolidge

ALTHOUGH many early critics of Marie de France's *Lais* focused attention on her sources,<sup>1</sup> her identity,<sup>2</sup> and her handling of "courtly love,"<sup>3</sup> more recent critics have recognized the *Lais*' artistic integrity, narrative structure, and subtle handling of love.<sup>4</sup> In two studies on the *Lais*, Emanuel Mickel argues persuasively that the progression of the first three *lais*—*Guigemar*, *Equitan*, and *Le Fresne*—introduce the three types of love seen throughout the collection: love begun in passion and ennobled through fidelity, love flawed by selfish desires and lack of restraint, and selfless love which is able to transcend the suffering that obstructs its fulfillment.<sup>5</sup> After introducing these types of love, Marie continues in the rest of the collection to anatomize love on many levels: love between lovers, between parent and child, between neighbors and fellow men, love of self and personal esteem, and finally love for God. Because it concludes the collection and synthesizes types, themes, and situations of love presented earlier, *Eliduc* provides Marie's culminating statement on the theme of love.

To present these views on love, Marie uses deliberate ambiguity, seemingly irreconcilable conflict, conscious dilemma, and symbolic resolution as she shapes *Eliduc*'s character. As she has done with other characters in earlier *lais*, Marie depicts *Eliduc* as neither unambiguously right nor wrong, but rather poised precariously on the narrow moral fence between a right love,

<sup>1</sup> See, for example, John E. Matzke, "The Lay of *Eliduc* and the Legend of the Husband With Two Wives," *Modern Philology* 5 (1907-8): 211-39; and Alfred Nutt, "The Lay of 'Eliduc' and the *Märchen* of Little Snow-White," *Folk-Lore* 3 (1892): 26-48.

<sup>2</sup> For a good discussion of the various studies on the identity of Marie, see Emanuel J. Mickel, Jr., *Marie de France* (New York, 1974), 16-21.

<sup>3</sup> For example, see John A. Frey, "Linguistic and Psychological Couplings in the Lays of Marie de France," *Studies in Philology* 61 (1964): 3-18; and S. Foster Damon, "Marie de France: Psychologist of Courtly Love," *PMLA* 44 (1929): 968-96.

<sup>4</sup> See Arnold Davidson, "*Eliduc* and 'The Ebony Tower': John Fowles's Variation on a Medieval Lay," *The International Fiction Review* 11 (1984): 31-36; Emanuel J. Mickel, Jr., "Marie de France's Use of Irony as a Stylistic and Narrative Device," *Studies in Philology* 71 (1974): 265-90; and Deborah Nelson, "Eliduc's Salvation," *The French Review* 55 (1981): 37-42. Deborah Nelson sees in the tale an allegory for the fall and redemption of man.

<sup>5</sup> Emanuel J. Mickel, Jr., "A Reconsideration of the *Lais* of Marie de France," *Speculum* 46 (1971): 39-65; and *Marie de France*, cited earlier.

which leads ultimately to charity, and a wrong love, which lacks "measure" and sinks to base passion. She further complicates his position by creating a conflict between his duty to wife and king on the one hand and his love for the princess on the other. Marie adds one last complication by placing Eliduc's dilemma within the context of God's unflinching law, which forces him to make a choice. By allowing the ambiguity to build throughout the lai, Marie focuses the conflict in the storm episode and in the scene with the weasels. There Eliduc finds his choices mirrored in the worlds of nature and religion, judged by their standards, and symbolically corrected by the weasels and the regenerative love they exemplify.

Even from the beginning of the lai, Marie carefully shades Eliduc's worthiness with ambiguity. She begins by establishing his loyalty to his king, describing him as brave, courtly, bold, and proud.<sup>6</sup> In fact, the king cherishes his judgment so highly that he leaves Eliduc in charge whenever he has to travel (31-35). Consequently, the reader is surprised when Eliduc is maliciously slandered and banished from court. Marie continues to show him in a good light as he sets his affairs in order and leaves. Similarly, when he arrives in the court near Exeter, Marie initially portrays him as a loyal knight who carefully weighs right and wrong. His valiant deeds in that country later qualify him to be appointed protector of the land. Even this early in the lai, however, Marie raises questions in the reader's mind concerning Eliduc's character by having him fight his battle in Exeter not directly but through an ambush, and by having him mistaken as a traitor by the king who had sent him out. Only after the mistake is cleared up does he welcome Eliduc as a hero. Although Eliduc's victory is clear-cut, his character is not. These details, although minor, begin to temper Marie's earlier depiction of him as wholly worthy.

Marie introduces ambiguity even more directly into his character as a lover. In the short prologue to the lai, Marie tells us that he and his noble wife loved each other loyally (12). When he is forced to leave home, he vows that he will be faithful to her (84). In the other court, however, Marie emphasizes his courtly qualities (271, 291) and physical attractiveness so that we are not surprised when Guilliadun falls immediately in love with him. As his love for her begins to emerge, Eliduc becomes confused in his loyalties. Like Tristan who found himself loving one Isolde and marrying another, Eliduc finds himself torn between two women. There is the princess for whom he feels a genuine love, but he knows that consummating his

<sup>6</sup> *The Lais of Marie de France*, trans. Robert Hanning and Joan Ferrante (New York, 1978), 196, line 6. All further quotations from *Eliduc* will be from this edition (pp. 196-229) and will be cited by line number in the text.

love will force him to break his oath of honor to his wife. There is also his wife, who at first appears to be the obstacle to his love. It is the wife, however, guided by her Christian charity and the example of the weasel, who ultimately provides the possibility for redemption and regeneration. The love *for* one woman creates the dilemma; the love *expressed by* the other woman provides the solution.

Doubling not only performs this artistic and thematic function but also precipitates Eliduc's seemingly insurmountable dilemma between duty and love. Eliduc owes his loyalty and service to the first king, but he has also pledged himself as a mercenary to the second king and served him as protector of the land. In addition, not only has he vowed faithfulness to his wife, but he embroils himself in further complications when he pledges his love to the princess.

Having thus established the conflicts thematically and structurally, Marie focuses on the dilemma which rages within the sensitivities of Eliduc: between his passionate love on the one hand and his acute conscience on the other. Although Mickel argues that Eliduc's reason prevails over his passionate desires, keeping him from any dishonorable action that would violate his oath to his wife,<sup>7</sup> Eliduc's responses and those of Guilliadun are not quite so clear-cut as Mickel would seem to imply. Instead, they are deliberately ambiguous. When Eliduc becomes aware of his love for the maiden, he savors each moment he spends with her, exulting in the relationship she offers. But he also thinks of his wife as he recalls his oath of faithfulness to her:

He had no joy or pleasure  
except when he thought of her.  
But he considered himself unfortunate  
because, before he left his own country,  
he had promised his wife  
that he'd love no one but her. (460-65)<sup>8</sup>

In his heart he wants to be true, but his flesh is weak.

And yet he does not indulge his flesh. Marie emphasizes the restraint in the relationship:

<sup>7</sup> Mickel, "A Reconsideration," 62.

<sup>8</sup> Old French from *Die Lais der Marie de France*, ed. Karl Warnke, Bibliotheca Normannica 3 (Halle, 1925), 201:

Unkes n'ot joie ne delit,  
fors tant cum il pensa de li.  
Mult se teneit a malbailli,  
kar a sa femme aveit premis,  
ainz qu'il turnast de sun païs,  
que il n'amereit se li nun.

But there was no folly between them,  
 no frivolity, no shame:  
 When they were together,  
 their lovemaking consisted  
 of courting and speaking  
 and giving fine gifts. (575-80)<sup>9</sup>

And just a few lines later Eliduc voices his own conscience and that of the church:

If I were to marry my love,  
 Christianity would not allow it.  
 This is bad in every way.  
 God, how hard it is to part.  
 But whoever may blame me for it,  
 I shall always do right by her. (601-6)<sup>10</sup>

It would seem that Eliduc is clearly tempted but that he restrains himself at the crucial moment "because of the faith he [o]wed his wife / and because he served the king" (475-76).

Such statements would seem to support Mickel's position that reason overcomes passion at the crucial moment, but it is not so simple. Marie carefully undercuts such apparent nobility with two considerations. First, Eliduc fails to tell Guilliadun that he is already married—and he feels guilty about his failure:

she thought to have him completely  
 and to hold him, if she could;  
 she didn't know he had a wife.  
 "Alas," he said, "I have acted very badly. . . ." (582-85)<sup>11</sup>

<sup>9</sup> Warnke, 204-5:

Mes n'ot entre els nule folie,  
 joliveté ne vileinie;  
 de duncier e de parler  
 e de lur beals aveirs doner  
 esteit tute la druërie  
 par amur en lur cumpaignie.

<sup>10</sup> Warnke, 205:

S'a m'amie esteie espusez  
 nel suferreit crestiëntez  
 De tutes parz va malement.  
 Deus, tant est dur departement!  
 Mes qui qu'il turt a mesprisun.  
 vers li ferai tuz jurs raisun.

<sup>11</sup> Warnke, 205:

el le quidot del tut avoir  
 e retenir s'ele peüst;  
 ne saveit pas que femme eüst.  
 'A las', fet il, 'mal ai erré! . . .'

Earlier in the lai when the messenger delivers Guilliadun's love tokens, Eliduc's marked silence prompts the messenger to observe,

I find him courtly and wise,  
one who knows how to hide his feelings. (423-24)<sup>12</sup>

Hiding the true reason why he cannot marry her, he cunningly evades her questions just as he later equivocates when his wife inquires about his sorrow. Here he fails a second time when he gives only a partial answer, claiming that his unfulfilled obligations to the king abroad are the cause of his grief. While he may not have sinned through commission, he is surely guilty of omission.

By carefully shaping each detail toward the climactic scene of the weasels in the chapel, Marie has highlighted his dilemma as a knight and as a lover. Then she dramatically heightens the dilemma by placing Eliduc back in his original situation—back with his own king and his own wife. What before had been an intellectual question, isolated as he was from his wife and his king, now becomes an active tempest of mind and soul, pushing Eliduc to a choice, an action, and an eventual repentance. The precarious ethical balance which Marie has taken such great pains to establish is now tipped in one direction because of the overpowering love Eliduc has for Guilliadun. Technically honest and pure, the love between them may be ethically neutral,<sup>13</sup> but the means by which it is furthered not only counters human prescriptive law but offends the uncompromising dictates of God and nature.

That Eliduc strictly fulfills his oath to his wife and king cannot be contested. But his attempts to restrain his passion are successful only in terms of the letter of the law. The coldness he shows toward his wife upon his return home must be seen as reprehensible when viewed in the context of Eliduc's own banishment. Just as he had pleaded to understand the king's disfavor earlier, so Guildeluec begs earnestly to know how she has offended. Eliduc's evasive response to her must fall under the same censure as his deceitful answers to Guilliadun's proposals. Marie tells us in fact that at this point he behaved "furtively" (717). He manipulates the feud he has been called home to settle so that he can return to his love on the appointed day, chooses trusted servants, and makes them pledge to keep everything hidden.

<sup>12</sup> Warnke, 200:

jeol tienc a curteis e a sage,  
que bien set celer sun curage.

<sup>13</sup> Mickel, "A Reconsideration," 41-43. Mickel argues that love in Marie should be judged not on the basis of whether or not it is adulterous but rather on the basis of whether or not it is of high quality. He does qualify this somewhat in a footnote on pages 41-42.

From this point until the supposed death of Guilliadun, Eliduc's action can only be seen as deceptive. Not only has he sworn his men to secrecy, but he returns to the land that had befriended him when he had been banished and cleverly takes lodgings far from the harbor to remain unknown: "he didn't want to be seen, or found or recognized" (765-66). Eliduc sends for Guilliadun to come under the cover of night, and they meet in an enclosed wood. The deceit, stealth, and cunning that earlier characterized the negative side of Eliduc's love now becomes actualized as he carries off the maiden in the darkness, an action which he had earlier rejected because it would force him to betray his faith to her father (687-88).

Until this point in the narrative, the struggles have been primarily internal. But when his ambiguity turns into overtly wrong action, the figurative internal tempest becomes external and explicit, mirrored symbolically in the tempest at sea. Arising suddenly just when they are near his original home, the storm tests Eliduc's character when the threat of destruction prompts a crew member to reveal the hidden truth of his marriage. Like its scriptural analogue in Jonah, the sudden tempest in nature can be seen to judge Eliduc's deceit even as it pushes him to act.<sup>14</sup>

By deliberately and ironically juxtaposing Eliduc's guilty action with the sailors' invocation of the saints and the Virgin, Marie foreshadows important themes she will later develop in the chapel scene: concerns of death and life, of sin and redemption, of earthly hate and heavenly love. Each of the saints invoked by name—St. Nicholas and St. Clement—has in the legends associated with him a story of a miracle at sea, either a stilling of the waves, a personal triumph of his life over the sea, or a reclaiming of a life snatched by the water.<sup>15</sup> Such miracles of the sea emphasize the control of nature by Divine Providence, the restoration of life through the intercessory prayer of the saints, and selfless compassion. Thus, when Marie juxtaposes Eliduc's action at sea with the invocation of these saints, along with that of the Virgin and her Son, who stilled the waters and restored the dead to life,

<sup>14</sup> Many critics have made this connection to the Jonah story. One interesting article on the storm episode is Brewster E. Fitz, "The Storm Episode and the Weasel Episode: Sacrificial Casuistry in Marie de France's *Eliduc*," *MLN* 89 (1974): 542-49.

<sup>15</sup> Legends credit St. Nicholas with stilling a storm at sea, miraculously restoring a sailor who had fallen overboard, and guiding mariners to a safe harbor; see *The Golden Legend of Jacobus de Voragine*, trans. Granger Ryan and Helmut Ripperger, 2 vols. (London, 1941), 1:18-19. For additional stories not represented in *The Golden Legend*, see A. Jameson, *Sacred and Legendary Art*, 2 vols. (Boston, 1895), 2:60-63. For this reason many harbors, chapels, and altars are dedicated to him, and, as patron of seamen, his emblem is frequently that of an anchor; see also F. C. Husenbeth, *Emblems of Saints* (London, 1850), 32-33.

Stories concerning St. Clement narrate his martyrdom in the sea, the restoration of a young boy drowned in the sea, and a reuniting of his own family torn apart through deceit and a storm at sea; see *The Golden Legend* 2:696-706.

the irony becomes explicit. Unlike Jonah, who recognized his wrong and was willing to accept the penalty, and unlike Nicholas and Clement, who were so in touch with the Creator of the world that they could calm nature and restore life, Eliduc responds in rage to the accusation that he was attempting to marry Guilliadun "in defiance of God and the law / of right and of faith" (837-38). Failing to acknowledge the truth he had hidden so long and failing to accept human responsibility, he reacts with passion, killing the truthful squire and pushing his body into the sea.<sup>16</sup>

There is a potential danger in love, a danger that becomes actualized when passions rule and when cunning and deceit usurp the place of truth and honesty. By allowing the passions of a guilty conscience to rule his actions, rather than the reasoned judgment which had characterized him earlier, Eliduc has literally killed a man and has figuratively killed any future his love might have had. This series of unambiguously wrong actions—carrying off Guilliadun by stealth, denying the truth, and slaying its spokesman—now leads to death: physical death, emotional unresponsiveness, and spiritual sterility.

At this point, Marie introduces a rich complex of symbols and implications by using the setting of the chapel, the role of the holy hermit, and the central place of the altar.<sup>17</sup> It is surely significant that when Eliduc arrives at the hermit's chapel with the supposedly dead Guilliadun, the doors are locked tight against him. Because of his uncontrolled rage and murderous action, as well as his earlier deception, the chapel and the faith it represents are closed to him; the hermit, with whom he had spoken many times before, had died only eight days earlier. At this point both religion and love are apparently dead to Eliduc, and as he brings the unconscious maiden to the deserted chapel and makes a bed for her in front of the altar, various themes running throughout the lai now come together.

It is surely not without significance that Eliduc creates a bed for Guilliadun in front of the altar, since both the bed and the altar have rich associations that again underscore the ambiguity seen in the lai. On the one hand, the bed prepared for Guilliadun represents death or eternal sleep, a common meaning for a bed in the Middle Ages,<sup>18</sup> and one appropriate here since

<sup>16</sup> Fitz argues that the sailor who speaks out is the true guilty party according to sacrificial logic. He goes on to argue that Eliduc must kill the sailor in order to bring the ship to shore.

<sup>17</sup> Matzke, "The Lay of Eliduc," 223, points out in his study of sources that Marie has clearly added the two episodes of the storm and of the weasels with the herb of life. In his research he was able to find no counterpart or explanation in the group of poems which are the clear analogues to *Eliduc*.

<sup>18</sup> See, for example, the symbolic beds in Chrétien de Troyes's *Cligès* and Gottfried von



Eliduc fully believes that she is dead. The bed, however, can also signify passion and physical consummation, as it does in many medieval romances. In this context, Eliduc's deceits and actions have effectively killed any hopes for consummation. Furthermore, the bed can also have very positive connotations in suggesting the marriage sacrament and the creation of life. So within itself, the bed can be both positive and negative, suggesting both death and life. But the location of this bed is also significant: it is made before the altar (929). Calling up the idea of the Eucharist as the remembrance of Christ's death, the altar seems an appropriate place for a bier or a tomb. But it paradoxically also suggests Christ's victory over death and the possibility of eternal life springing from mortal death; through the altar, death in life can miraculously become life in death. The composite image of tomb, altar, and bed, taken as a whole, implies a fusion in a heavenly, eternal love for God. Purely human love, celebrated in earthly beds of passion, ceases at death, but heavenly love, a true charity, pushes beyond the boundaries of this life to everlasting life.

In this religiously significant setting, Marie creates a scene in which the ambiguities, conflicts, and dilemmas presented earlier in the lai are resolved through the miracle of love, here presented in natural, supernatural, and human terms. Just as the tempest symbolically mirrored the inner state of Eliduc's mind, this scene at the end of the lai also unfolds through symbolic, natural doubling. After sending a servant to follow Eliduc to learn his secret sorrow, Eliduc's wife discovers the young maiden lying before the altar. As she watches, a weasel runs across the body and is struck down by the servant. A second weasel, discovering its stricken mate, runs outside to get a red flower, places it in the dead weasel's mouth, and miraculously the weasel comes back to life. Certainly the weasels and their actions mirror situations in the world of mankind, as many critics have observed. Beyond that, however, the rich meanings associated with the weasel reveal it to be the central iconographical image of the lai: the ambiguity in the symbolism of the weasel parallels the evolution of love seen in the lai, from the pure, earthbound, and frustrated love first exhibited by Eliduc and Guilliadun to the enduring, transcending charity expressed by Guildeluec.

Even from early times, the legendary associations of the weasel are paradoxical.<sup>19</sup> The weasel can be seen as either a good omen or a bad

Strassburg's *Tristan*. For a more explicit statement, see Bernard of Clairvaux, *On the Song of Songs*, vol. 4, trans. Irene Edmonds, Cistercian Fathers Series 40 (Kalamazoo, 1980), 102-7.

<sup>19</sup> One very important article on this subject is Manfred Bambeck, "Die Wieselepisode im 'Eliduc' der Marie de France," *Archiv für das Studium der neueren Sprachen und Literaturen* 208 (1971-72): 334-49. In this article Bambeck focuses on the early sources that describe the weasel, including such authors as Giraldus Cambrensis, Alexander Neckam,

omen,<sup>20</sup> feared for its demonic nature,<sup>21</sup> or sought after as a guardian of treasure.<sup>22</sup> In common and proverbial associations, the weasel is cited as cunning, clever, and tricky,<sup>23</sup> and it is also depicted as a bloodthirsty predator.<sup>24</sup> In these qualities, Eliduc is like the weasel. Although Marie presents Eliduc as a noble and worthy knight, she undercuts some of that nobility by showing his craftiness in battle, his deceitfulness with both women, and the bloodguilt which he must now bear for killing the sailor. The ambiguity is further heightened by the association of the weasel with lust.<sup>25</sup> Although pure in many ways, the love Eliduc is pursuing has the potential of becoming base—especially when one considers the actions his passions have prompted. His duplicity and craftiness have one other connection to the weasel; the weasel, according to early tradition, was a shape changer.<sup>26</sup> There can be no doubt that Eliduc has played many roles, appearing as one person to his wife and king and representing himself in another way to Guilliadun.

Surely these common proverbial associations of the weasel spring most readily to mind, and these negative qualities find ready analogues in the lai. But the weasel also has more positive associations, which here serve not only to judge but also to provide a corrective to his misdirected actions. The weasel has long been believed to signify judgment<sup>27</sup> and to be capable of averting or turning aside evil.<sup>28</sup> Furthermore, the weasel has been seen as prophetic and as an avenger of oaths.<sup>29</sup> In these associations, the presence of the weasel performs a function similar to that of the storm at sea: judging the rightness or wrongness of an action and recalling the oaths Eliduc made to his wife, which, though kept to the letter, were unfulfilled in spirit. In a positive sense, these associations suggest a prodding in the right direction.

Like the marriage bed, the weasel also has a connection to birth and fertility. Long associated with the weasel is the belief that it conceives through

Hildegard von Bingen, Richard de Fournival, and others. It is an excellent catalogue of early beliefs about weasels.

<sup>20</sup> Another very significant article on weasel symbolism, though not tied directly to *Eliduc*, is Thomas S. Duncan, "The Weasel in Religion, Myth and Superstition," *Washington University Studies* 12, Humanistic Series (1924): 33. See also Beryl Rowland, *Animals with Human Faces: A Guide to Animal Symbolism* (Knoxville, 1973), 159.

<sup>21</sup> Duncan, "The Weasel," 43.

<sup>22</sup> *Ibid.*, 62.

<sup>23</sup> *Ibid.*, 62.

<sup>24</sup> Otto Keller, *Die Antike Tierwelt*, 2 vols. (Leipzig, 1909; rpt. Hildesheim, 1963), 1:170-71.

<sup>25</sup> Duncan, "The Weasel," 62; Beryl Rowland, *Blind Beasts: Chaucer's Animal World* (Kent, Ohio, 1971), 27.

<sup>26</sup> Rowland, *Animals*, 158.

<sup>27</sup> Duncan, "The Weasel," 58.

<sup>28</sup> *Ibid.*, 33.

<sup>29</sup> *Ibid.*, 43, 50-51; Rowland, *Animals*, 160.

the ear and gives birth through the mouth,<sup>30</sup> a belief related to the classical story of Galanthis. At the birth of Hercules, Lucina, sent by Juno, was sitting by the altar, her arms and legs crossed in an attempt to keep the mother from giving birth. A servant of the mother, Galanthis, noticed this strange circumstance and, realizing Juno's intended mischief, spoke to Lucina as if the child had just been born. The startled goddess of birth leaped to her feet, uncrossing her arms, and thus allowed the natural passage of the child. Learning of Galanthis's deception, the goddess turned her into a weasel, condemning her to give birth through the mouth because of the falsehoods which had issued from her lips.<sup>31</sup>

Not only is the weasel thus associated with childbirth and fertility, but this story of Galanthis has special relation to *Eliduc* because of the number of falsehoods Eliduc tells. Worshipped by many as the symbol of speech,<sup>32</sup> the weasel also signified in Christian terms one who willingly receives the seed of divine word, but who hides what he has heard.<sup>33</sup> Marie herself, in the "Prologue" to the *Lais*, has used a similar truth:

Whoever has received knowledge  
and eloquence in speech from God  
should not be silent or secretive  
but demonstrate it willingly.<sup>34</sup>

Fused together in the symbol of the weasel, these concepts of falsehood, truth, and fruitfulness take on added meaning in the context of *Eliduc*. Eliduc has known the truth of his dilemma but has kept it hidden through deceit and evasive answers. When he makes the falsehood overt by carrying off Guilliadun, it leads only to unconsciousness and death of the body (the sailor), love (Guilliadun), and spirit (the deserted chapel and hermit). To possess truth without honesty is fruitless.

Although the natural and supernatural join to censure Eliduc for this wrong on his part, they also provide the corrective through the example

<sup>30</sup> Duncan, "The Weasel," 59; Rowland, *Animals*, 159; Florence McCulloch, *Mediaeval Latin and French Bestiaries*, University of North Carolina Studies in the Romance Languages and Literatures 33 (Chapel Hill, 1960), 186-88; and T. H. White, *The Bestiary: A Book of Beasts* (New York, 1960), 92. For an unusual allegorical interpretation of this meaning of the weasel, see Fitz, "The Storm Episode," 548-49.

<sup>31</sup> Ovid, *Metamorphoses* 9.369-90.

<sup>32</sup> Duncan, "The Weasel," 59; Rowland, *Animals*, 159.

<sup>33</sup> McCulloch, *Bestiaries*, 186; Rowland, *Animals*, 159; White, *The Bestiary*, 93.

<sup>34</sup> *The Lais*, 28, lines 1-4; Warnke, 3:

Qui Deus a duné esciënce  
e de parler bone eloquence,  
ne s'en deit taisir ne celer,  
ainz se deit voluntiers mustrer.

of the weasel and its regenerating love. Long associated with the weasel is the legend that the weasel knows the herb of life and uses it to heal the sick among its young, as well as to restore life to the dead.<sup>35</sup> In *Eliduc* this miracle of regeneration is staged in the setting of the deserted chapel where the seemingly dead maiden lies stretched out before the altar. When the servant strikes the weasel with a stick after it runs across the girl's body, he is in many ways like Eliduc himself. He, too, is associated with cunning since he is the one who followed Eliduc to discover his secret, and he has taken life, just as Eliduc did with the sailor. When the weasel's companion discovers the lifeless corpse, it runs to the wood and returns, bearing the herb of life in its mouth. Transferring this red flower to the mouth of its mate, it restores life.

By including this story of the weasels, Marie provides a new context for falsehood and its ability to kill love. If both weasels are female, as Damon suggests<sup>36</sup> (and as the ambiguities of the Old French would allow), there is a clear prefiguring of the relationship between the two women. One has been figuratively slain by the deceit of Eliduc. The other, possessing true charity, miraculously restores the love between Guilliadun and Eliduc. If, on the other hand, the first weasel is male, his death parallels the sterility that Eliduc feels; only the vermeil flower of Guilliadun's love made possible by his wife's sacrifice is able to restore vitality. Regardless of the sex of the first weasel, however, the inclusion of the weasels forces us to transcend the natural to understand something of supernatural love.

That Marie has changed the color of the flower from the traditional yellow flower of the legend is also significant.<sup>37</sup> Although the color red can have connotations of fire, anger, and something demonic,<sup>38</sup> the meanings here seem more positive. According to Christian liturgy, red is the color of Pentecost, the coming of the Holy Spirit, and as such is associated with purification.<sup>39</sup> It is also a color of martyrdom and specifically the color of Christ's passion.<sup>40</sup> In a broader sense, red is the color of love and passion,

<sup>35</sup> Duncan, "The Weasel," 62-65; McCulloch, *Bestiaries*, 187; Rowland, *Animals*, 160. See also Bambeck, "Die Wieseepisode," 343-49, for a good catalogue of the early sources and retellings of this legend.

<sup>36</sup> Damon, "Marie de France," 994.

<sup>37</sup> See *The Historical Works of Giraldus Cambrensis*, ed. Thomas Wright (London, 1863), 46-47. Alice Kemp-Welch, *Of Six Mediaeval Women* (London, 1913; rpt. 1972), 54, cites J. G. Frazer as suggesting that the change to red may signify blood and "an infusion of fresh life into the veins of the dead."

<sup>38</sup> Ad de Vries, *Dictionary of Symbols and Imagery* (Amsterdam, 1974), 382-83. See also George Ferguson, *Signs and Symbols in Christian Art* (New York, 1954; rpt. 1976), 152.

<sup>39</sup> De Vries, *Dictionary*, 383; Dorothea Forstner, *Die Welt der Symbole*, 2d ed. (Innsbruck, 1967), 128.

<sup>40</sup> De Vries, *Dictionary*, 383; Forstner, *Die Welt*, 128.

of power and youth,<sup>41</sup> and is associated with charity and the Virgin Mary.<sup>42</sup> In these connections the color red is a far more appropriate color than yellow for the regenerating love of Guildeuuec and the weasel.

Paradoxically, as the wife acts in accord with the natural life force of rebirth and fertility, she denies her own sexuality. Her action of placing the red flower in the mouth of the maiden literally restores the young girl's life and symbolically restores and purifies the love between Eliduc and Guilliadun. The wife acts out the ideal of charity: giving without thought of recompense, and in that sense, she is like a martyr who gives even though her own loss may be great. In contrast, the potentially selfish love we have seen in Eliduc nurtured by deceit, dishonesty, and an upset of natural and divine order leads only to death and sterility. It results in disorder, confusion, frustration, sorrow and grievous disunity. But true charity, which results in selfless action, yields symbolic fruit: honesty, genuine love, and a unity which draws men and women together in the hope of salvation and eternal life.

With themes and artistry such as Marie has demonstrated in this lai, *Eliduc* is surely a fitting conclusion to a collection of stories which focus on the nature of love and on various obstructions to true love. While other lais highlight social pressures that keep lovers apart, selfish passions that distort love, and the seeming need to keep love hidden because of these obstructions, *Eliduc* integrates these issues in the larger context of devotion to God. Some of the other lais do in fact depict genuine love but either focus on the reconciling power of love within the social realm alone, as in *Le Fresne*, or suggest that true love is possible only outside this world, as in *Lanval*. In *Eliduc*, Marie demonstrates for the first time an ideal love which unites the natural and the supernatural as it overcomes the obstacles to love and reforms society. While such a love may not be a practical pattern for everyone, Marie presents it rather as a goal capable of drawing all who embrace it away from selfish indulgence and into a new level of love and life.

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<sup>41</sup> De Vries, *Dictionary*, 383; Forstner, *Die Welt*, 127.

<sup>42</sup> De Vries, *Dictionary*, 383; Forstner, *Die Welt*, 128.

## ADDENDA TO *CODICES LATINI ANTIQUIORES* (II)

(†) *Bernhard Bischoff, Virginia Brown, and James J. John\**

IN the brief introduction to the first set of *C.L.A.* Addenda published in *Mediaeval Studies* 47 (1985) we noted that further candidates for inclusion in E. A. Lowe's monumental work would surely emerge. This second series of Addenda shows that expectation to have been well founded. The new items number almost twenty, ranging from the fourth century to the end of the eighth century and including classical, patristic, liturgical, and canonical texts; there are nine new membra disiecta.

Our presentation of the new material is in accord with the principles governing the arrangement of the earlier Addenda. Thus, the new items are given first (pp. 288-301) in alphabetical order according to present location and described in keeping with *C.L.A.* format. Membra disiecta are then listed separately on pp. 302-5 in the order of their original serial numbers (with reference to second and third occurrences). The bibliographical information which appears at the end of each entry is not exhaustive, consisting rather of those publications in which the item is for the first time thoroughly described or at least mentioned. Finally, such details as changes in location and new shelf marks are listed in the Appendix.

The following items have been intentionally omitted from the Addenda:

Oslo/London, The Schøyen Collection MS 77. Gregorius M., *Moralia in Iob* (II. 12-15). Rhaetian minuscule saec. IX in. (Cf. *Bookhands of the Middle Ages: Part III. Bernard Quaritch Ltd. Catalogue 1088* [London, 1988], lot 9 and facing plate: "8th/9th century").

\* When Prof. Bernhard Bischoff died 17 September 1991 in Munich, the material for this article had already been collected by him and Virginia Brown. He was never to read the descriptions of the new items and membra disiecta which she prepared, for these were sent to him a few days after the accident on 29 August that ultimately claimed his life. James J. John graciously agreed to read these drafts; not surprisingly, his vast knowledge of *C.L.A.* prompted numerous and valuable suggestions, and he is rightfully acknowledged here as a coauthor. In general the entries include Prof. Bischoff's views on the date and origin of new items when they could be ascertained from published sources or in private correspondence addressed to Virginia Brown and other scholars. Prof. Bischoff's untiring efforts and extraordinary generosity provided the impetus for assembling of the second series of *C.L.A.* Addenda, and this article is dedicated to his memory.

Oslo/London, The Schøyen Collection ms 83. Paulus Diaconus, Homiliarium. Caroline minuscule saec. ix. (Cf. *Bookhands of the Middle Ages: Part III*, lot 1 and facing plate: "8th/9th century").

Oxford, Keble College Millard 41, frags. 1, 2, A, C. Sacramentarium Arnonis. Early Caroline minuscule saec. ix in. (Cf. M. B. Parkes, *The Medieval Manuscripts of Keble College Oxford* [London, 1979], p. 335 and pl. 174: "s.viii ex.").

We should like to thank two scholars who generously communicated to us their discoveries of new items and allowed us to publish them here: Prof. P. F. J. Obbema (No. 1872); Prof. Roger E. Reynolds (No. 1879). The following scholars and librarians kindly supplied additional information: Dr. William Brashear (Berlin); Dr. Paul Saenger and Prof. Braxton Ross (Chicago); Prof. Walter Berschin and Fräulein Angelika Häse (Heidelberg); Prof. J. P. Gumbert and Prof. P. F. J. Obbema (Leyden); Prof. A. C. de la Mare (London); Miss Kate Harris (Longleat House); Dr. Stefan Jäggi (Lucerne); Prof. Mirella Ferrari (Milan); Dr. Sigrid Krämer (Munich); Dr. Elisabeth Beare (Nuremberg); Dr. B. C. Barker-Benfield and Prof. P. J. Parsons (Oxford); Dr. Kurt Hans Staub (Darmstadt); Prof. James P. Carley (Toronto); Prof. Benedetto Bravo (Warsaw). More new items will surely continue to be found, and we will gladly receive notice of these for future *C.L.A.* Addenda.

Finally, we are grateful to the various libraries and archives in which the new items are now preserved for allowing us to publish the plates accompanying this article. The photographs of Nos. 1868 and 1873 are reproduced respectively by permission of the Houghton Library, Harvard University and by permission of the Marquess of Bath, Longleat House, Warminster, Wiltshire, Great Britain.

## I

## NEW ITEMS

1866. — BERLIN, ÄGYPTISCHES MUSEUM, PAPYRUSSAMMLUNG  
PAP. BEROL. 21299.

MIXED UNCIAL AND EARLY HALF-UNCIAL SAEC. IV.

¶ VERGILIUS, AENEIS (x. 832-836, 863-867).

A fragment of a papyrus codex; 35 × 160 mm., with parts of 5 lines surviving of an estimated 31. Abbreviations: -q followed by a curving line = -que. A few accents marked. Spelling good, but 'dignauere' for 'dignabere'. Ink reddish-brown. Script is a mixed uncial (A D G S) and early half-uncial (b d m r) with some resemblance to *C.L.A. Supplement* (S) 1708: the bow of A is shallow and mostly pendant, and it connects to the upright without a penlift; C and G, both rectangular, are distinguished by the long tail of G descending to the left; the bows of b and D are full; H has the capital form; L descends below the base-line with its foot extending obliquely or horizontally beneath the next letter; r is decidedly square-shouldered; S is top-heavy. Greek influence is apparent in A, E, P, and N (thin oblique).

Origin uncertain, perhaps Egypt, to judge from the Greek symptoms. Provenance unknown.

Our plate from the verso.

*Bibliography:* W. Brashear, "Potpourri," *Archiv für Papyrusforschung* 34 (1988): 11-12, no. 7 and fig. 9 (verso).

## 1867. — CAIRO, COPTIC MUSEUM INV. N. 15/86.

UNCIAL SAEC. V.

¶ LIVIUS, AB URBE CONDITA (LIB. XI, exc.) (?).

One scrap of a parchment codex, probably from the upper part of a folio; 96 × 114 mm. <calculated width of written space 157 mm.> in 2 columns, with parts of 12 lines surviving. Ruling on the flesh-side. Single bounding lines in the margins. Prickings seen in the intercolumnar space. No punctuation. Expunction by a dot above and oblique stroke through the letter. Abbreviations confined to B• = -bus. Omitted M or N at line-end



marked by a horizontal stroke above or after the vowel. Spelling shows archaic features ('nouos' for 'nouus', 'suom' for 'suum'), confusion of **b** and **u**, and confusion of **d** and **t**. Parchment fine. Ink dark brown. Script is a bold, angular uncial of the oldest type: the bow of **A** is very pointed, often ending in a downward hairline stroke; the upper bow of **B** is a mere comma; the eye of **E** is very small and sometimes closed; the first stroke of **M** is straight; **N** is broad, and the first stroke goes below the line; the bow of **R** is shaped like a large comma.

Origin uncertain, perhaps Africa. Found in 1986 near the medieval monastery of Naqlun in Egypt.

Our plate from the flesh-side.

*Bibliography:* B. Bravo and M. Griffin, "Un frammento del libro XI di Tito Livio?" *Athenaeum: Studi periodici di letteratura e storia dell'antichità*, n.s., 66 (1988): 447-521 and 8 plates (recto and verso).

1868. — CAMBRIDGE (MASS.), HARVARD UNIVERSITY, HOUGHTON LIBRARY MS TYP 694.

UNCIAL SAEC. VIII-IX.

¶ LIBER COMITIS.

One folio, now cut down to 284 × 213 mm. <253 × 170 mm.> in 2 columns of 25 lines. Ruling on the flesh-side. Double bounding lines enclose each column. Titles and rubrics in text-script and partly in red. Punctuation: the main pause is marked by an angular colon, lesser pauses by a semicolon, angular medial point, or medial oblique with or without point; the text is written verse by verse. Abbreviations: **p'** = post; the normal Nomina Sacra and liturgical terms. Omitted **M**, at line-end only, is indicated by a horizontal stroke with a downward hook at either end and placed over the vowel. A large initial filled with interlace patterns and with leaf motifs at the extremities begins each reading; colours used are gold, red, green, yellow, violet, and dark blue; a large black letter begins each verse. Parchment thin. Ink blackish-brown. Script is a careful, imitation uncial recalling the Ingolstadt Gospels (*C.L.A.* IX. 1325) and the Nuremberg-New York Gospel fragments (*C.L.A.* IX. 1347, XI, p. 24): the pointed shallow bow of **A** rests on the base-line; the tongue of **E** is central; the tail of **G** is a nearly vertical hairline; shafts begin and end with a tiny hairline at the left and right respectively. Some corrections and marginalia by medieval and later hands.

Written in a Southeast German centre. Purchased in 1956 from Erik von Scherling by Maggs, from whom Philip Hofer acquired it in 1957; bequeathed by him (d. 1984) to Harvard University.

Our plate from the recto.

*Bibliography*: R. E. Reynolds, "An Eighth-Century Uncial Leaf from a Mondsee *Liber comitis* (Harvard, Houghton Library MS Typ 694)" in *Scire litteras: Forschungen zum mittelalterlichen Geistesleben*, ed. S. Krämer and M. Bernhard (Munich, 1988), 327-30 and figs. 16-17 (complete facsimile) on pp. 331-32.

1869. — CHICAGO, NEWBERRY LIBRARY 1.5, FRAGM. 26.

ANGLO-SAXON MINUSCULE SAEC. VIII-IX.

¶ EXCERPTA EX ISIDORI ETYMOLOGIIS (LIBB. I, II, III).

One damaged folio cut down to 213 × 126 mm. <162 × ca. 110 mm.> in 24-26 long lines. Ruling after folding, as prickings are seen in the inner margin. Punctuation: a medial point denotes various pauses; a point with commas or various flourishes occurs at the end of an excerpt. An omission is marked by *signes de renvoi*. Abbreviations include the Insular forms of 'est' and 'per' and the typically Anglo-Saxon form of '-tur'; also the common forms *aū* = autem, *dī* = dicitur, *ēē* = esse, *p* = prae, *-q*; = -que, *q̄s* = quasi, and *-ī* = -ter. Spelling good on the whole, but 'apellamus', 'efemeris'. Simple, larger letters, some daubed with yellow, begin excerpts and sentences. Membrane prepared in the Insular manner. Ink black or dark brown. Script is a well-formed, narrow Anglo-Saxon minuscule: *a* may be open or closed; *D* has the uncial form; *e* is theta-shaped; *g* has a protruding chest; the tops of ascenders are often clubbed; descenders are noticeably long; ligatures include *mi*. Some corrections in Caroline minuscule (seen on our plate).

Written probably in an Anglo-Saxon centre in Germany. The fragment was No. 22254 in the Philipps collection; later owners include C. L. Ricketts and William F. Petersen. Given to the Newberry Library in 1988 by Alma Schmidt Petersen.

Our plate from the recto.

*Bibliography*: S. De Ricci and W. J. Wilson, *Census of Medieval and Renaissance Manuscripts in the United States and Canada*, vol. 1 (New York, 1935), p. 660 ("series of early fragments").

## 1870. — COLMAR, ARCHIVES DÉPARTEMENTALES DU HAUT-RHIN FRAGMENT DE MANUSCRITS 700.

HALF-UNCIAL SAEC. VI-VII.

¶ ACTA CONCILII ANTIOCHENSIS (capp. 19-20).

One damaged scrap from the upper part of a folio; 82 × 56 mm. <estimated height of written space ca. 210 mm.>, with parts of 7 lines surviving of an estimated 25. Ruling on the flesh-side (recto). Punctuation: lesser pause indicated by a comma-like medial point. No abbreviations. Script is a well-formed half-uncial with marked contrast between thick and thin strokes: the shaft of **b** bends and resembles **I**; the thin oblique of **N** begins low and intersects the following stroke near the bottom; uncial **S** also used; the top of **t** begins with a loop.

Written presumably in France, to judge from the script. Found among the relics belonging to the Église paroissiale Saint-Grégoire of Ribeauvillé and formerly used as a wrapper.

Our plate shows the recto and verso.

## 1871. — DARMSTADT, HESSISCHE LANDES- UND HOCHSCHUL-BIBLIOTHEK 4319.

PRE-CAROLINE MINUSCULE SAEC. VIII<sup>2</sup>.

¶ BEDA, HOMILIAE (I. 24).

One bifolium, from the centre of a quire; maximum 230 × 150-160 mm. <180 × 120 mm.> in 27 long lines. Ruling on the hair-side before folding. Double bounding lines. Prickings in the outer margin guided the ruling. Punctuation: the main pause is indicated by a semicolon, lesser pauses by a medial point. Citations marked by an elongated **s**-like flourish in the left margin. Abbreviations include **au** = autem, one instance each of **-b**; = -bus and (at line-end) of **-t** = -tur, and the usual Nomina Sacra. Ink brown. Script is a bold, undisciplined pre-Caroline minuscule, reminiscent of Alemannic minuscule but without the characteristic **nt** ligature: **a** has various forms (**æ**, **œ**, and occasionally the uncial form); both uncial and minuscule **d** are used; **g** is usually of the half-uncial or Insular type; tall **i** and the shaft of **h** often lean to the left, as do the descenders of **f**, **p**, and **q**; the **re** ligature is used frequently, with the shoulder of **r** occasionally rising high above the line.

Written in a Germanic centre with Alemannic minuscule connections. Formerly served as a wrapper for a book ("Colloquium Sivalhasense [= Schwalheim bei Friedberg/Hessen] A. 1605" seen on the hair-side).

Our plate from fol. 1r.

*Bibliography:* Detailed study by Angelika Häse (who identified the text) forthcoming in the series *Heidelberger Handschriften-Studien des Seminars für Lateinische Philologie des Mittelalters*.

1872. — LEYDEN, BIBLIOTHEEK DER RIJKSUNIVERSITEIT **B.P.L.**  
**3230.**

MIXED UNCIAL AND HALF-UNCIAL SAEC. VIII.

¶ **DIALOGUS QUAESTIONUM LXV (XXIV-XXV).**

Upper and lower horizontally cut fragments from the central bifolium of a quire; estimated height 235 × present maximum 150 mm. <estimated height of written space 185 × 125 mm.>, with 12 and 11 long lines surviving of an estimated 25. Ruling on the hair-side, before folding. Double bounding lines in the outer margin, single in the inner. Prickings (slits) at the outer margin guided the ruling. Punctuation: a colon marks the final pause, a medial point lesser pauses. Abbreviations include **-b;**, **-q;**, **q;** = **-bus**, **-que**, **quae**; **ē** = **est**; **ēē** = **esse**; **ñ** = **non**; **ṡ** = **sunt**; the normal symbols for 'per', 'pro', 'prae'; the apostrophe for final **-us**; the horizontal stroke as a generic sign (= **-em**, **-en**, **-er**); and the usual *Nomina Sacra*. Omitted **M** is indicated by a wavy horizontal stroke often hooked at one or both ends. Ink brown. Spelling shows great variety: **c** for **qu**; frequent **ci** for soft **ti**; confusion of **d** and **t** ('diuiti' for 'diuidi'), confusion of **o** and **u** ('cognuscenda'), and numerous instances of **i** for **e** ('proptertia', 'uiditur'); erroneous omission or intrusion of **h** ('abit' for 'habet', 'hac' for 'ac'); misuse of single for double consonants ('colegam', 'resurectio'). Headings and initials in large capitals; capital **O** regularly has a dot within (see plate). Script is a curious mixture of uncial and half-uncial with some cursive elements: uncial **a** occasionally occurs, but this letter usually has the **œ** form; **D** and **G** are consistently uncial, **S** and **R** generally so (the half-uncial forms found once each at line-end and in suprascript additions—both forms used once in 'esse'); the long ascender of **D** breaks or curves to the right; the final stroke of **R** is often a medial horizontal; **b**, **f**, and **m** are half-uncial; the first stroke of **m** curves inward, the last is straight; the top of **t** has no finials; ligatures include **ae**, **et**, and **NT**. The script resembles that in *C.L.A.* VII. 862 except for the forms of **R** and **t**.

Origin presumably France, to judge from the script. Removed at an unknown date from the binding of ms Voss. lat. F. 56, which contains autograph works of Johannes Brodaeus Turonensis (1500-1563).

Our plate from the lower part of fol. 1r.

## 1873. — LONGLEAT HOUSE, LIBRARY OF THE MARQUESS OF BATH NMR 10589 (fly-leaves).

IRISH MINUSCULE SAEC. VII-VIII.

¶ ISIDORUS, ETYMOLOGIAE (VI. xvi. 6-xvii. 9; VII. i. 29-38).

Two mutilated and badly damaged unnumbered folios, turned sideways and used as front and back fly-leaves in a volume containing records of Glastonbury Abbey compiled in 1189; the upper part of one folio is now missing; maximum measurements of the more complete folio are  $336 \times 217$  mm. <calculated size ca.  $285 \times$  ca.  $232$  mm.> in 2 columns of 36 lines. Apparently single bounding lines enclose each column. Prickings seen in the outer margin (inner margin cut away). Punctuation: the point, sometimes in a medial position, marks various pauses; two consecutive points at end of sections; words are fairly well separated. Expunction by a dot placed above or below (in one instance, both above and below) the letter(s). Run-overs carried to the line above are set off by two oblique lines; run-overs to the line below are set off by a slightly zigzag angle. Accents over some monosyllables, over *i* in the long *-is* ending, and arbitrarily over other vowels (e.g., 'agnoscitur'). Abbreviations include the Insular symbols for 'autem', 'enim', 'est', 'quia', and also *dnr*, *qmd*, *qsi* = dicuntur, quomodo, quasi; perhaps one instance of the Insular symbol for 'per' ('perdampnauit' wrongly for 'praedamp-'); the common forms for 'per', 'prae', 'pro', and 'uel'; also *-b*·, *-q*· = -bus, -que; and the usual Nomina Sacra. The abbreviation-strokes and *m*-strokes are distinguished, the first turning up, the second down. Spelling shows the common Irish confusion of *a* and *e*, *e* and *ae*, *e* and *i*, doubling of single consonants ('dispositum', 'ussu'), and an instance of the erroneous insertion of *i* before a vowel in a scribal addition ('coietum'). Initials beginning a section are surrounded by yellow dots and placed outside the bounding line. Larger letters at the beginning of sentences. Ink now a faded brown. Script is an early Irish minuscule with some resemblance to the Schaffhausen Vita s. Columbae (C.L.A. VII. 998) and the Bangor Antiphonary (C.L.A. III. 311); *a* is consistently minuscule; with one exception each, *D* is uncial and *s* minuscule; the shoulder of *r* bends very low; the stem of gamma-shaped *y* often descends below the base-line. Some glosses by a later Insular hand, including one in Old Irish, and also by a later, non-Insular hand.

Written presumably in Ireland. At Glastonbury by 1189 (when Henry of Sully was elected abbot). Formerly used as a wrapper before the volume was rebound in the fifteenth century.

Our plate from the recto of the back fly-leaf.

*Bibliography:* J. P. Carley and A. Dooley, "An Early Irish Fragment of Isidore of Seville's *Etymologiae*" in *The Archaeology and History of Glastonbury Abbey: Essays in Honour of the Ninetieth Birthday of C. A. Raleigh Radford*, ed. L. Abrams and J. P. Carley (Woodbridge, Eng., 1991), 135-61 (study and transcription) and 5 plates.

1874. — LUCERNE, STAATSARCHIV FRAGM. PA 1034/21007.

ANGLO-SAXON MAJUSCULE SAEC. VIII<sup>2</sup>.

¶ ISIDORUS, SENTENTIAE (III. 59. 5-60. 8).

One folio, damaged on the verso; now cut down to 325 × max. 242 mm. <270 × ca. 195 mm.> in 2 columns of 30 lines. Ruling not discernible. Punctuation: all pauses indicated by a medial comma-like point. Accents over some monosyllables. Quotations signalled by .., to the left of the line. Abbreviations include the Insular symbols for 'est', 'per', 'quia' and the typically Anglo-Saxon form for '-tur'; also the ordinary forms *ēē* = esse, *n̄* = non, *p̄* = prae, *-q̄3* = -que; and the usual Nomina Sacra. Spelling shows Insular confusion of *s* and *ss* ('conpossitus') and of *i* and *e* ('dilegunt'). The large initial beginning the chapter is surrounded by red dots; letters immediately following diminish rapidly to normal text-size. Chapter title in red. Ink dark brown. Vellum stiff and also greasy in places. Script is an elegant compressed Anglo-Saxon majuscule verging on minuscule and resembling the script of *C.L.A.* II. 194b; *a* has the minuscule form; *d*, *n*, and *r* are used regularly, *R* occasionally; majuscule *S* is almost as frequent as the minuscule form; *e* is usually theta-shaped; *g* is *s*-like before *r*; the oblique of *z* plunges below the line; many upright strokes terminate in finials. Text often squeezed at line-ends as if the scribe were making a line-by-line copy of his exemplar. Some scribal or contemporary corrections.

Written in Northumbria. Formerly used as the cover of a volume in the archive of the Cistercian abbey of St. Urban (canton of Lucerne); the volume itself is also in the Staatsarchiv, Lucerne (shelf mark: COD·KU 107b).

Our plate from the recto.

1875. — MADRID, BIBLIOTECA NACIONAL 4673 (fragm.).

HALF-UNCIAL SAEC. VI-VII.

¶ AUGUSTINUS, ENCHIRIDION (IX. 28).

A scrap pasted down on the back cover below a fragment (2 Paralipomenon 29) in the 'romanesca' type of Caroline minuscule saec. XI ex. (*teste* P. Supino Martini); actual size, 64 × 54 mm. <estimated width of 1 column 63 mm.>.

1 of 2 columns surviving, with parts of 8 lines. Punctuation: a comma-like point marks a lesser pause. Spelling: **quo** for **co**. Script is a well-formed half-uncial closely resembling that of *C.L.A.* XI. 1669: **a** is open; the final stroke of **m** is rounded; the oblique of **N** begins low; **r** has a square shoulder; the upright of **t** is straight, with the topstroke terminating in a downward hook at one or both ends; the bows of **b**, **o**, **p**, and **q** are noticeably round and sometimes open.

Origin uncertain, presumably North Italy. The main manuscript contains *Catenae* in *Genesim* et *Iohannem* in Greek copied in the sixteenth century by Camillo Zanetti. Formerly owned by Francisco de Mendoza (1503-75), García de Loaisa (d. 1599), and the Convent of St. Vincent Ferrer, Plasencia.

Our plate shows all of the visible side.

*Bibliography*: G. de Andrés, *Catálogo de los códices griegos de la Biblioteca Nacional* (Madrid, 1987), 216-17.

1876. — MILAN, BIBLIOTECA AMBROSIANA C 228 inf. (fol. 184).

UNCIAL SAEC. VIII<sup>1</sup>.

¶ GREGORIUS M., MORALIA IN IOB (v. 33. 60-34. 63).

Palimpsest, upper script (for the lower script, *Acta s. Andreae* in uncial saec. VI-VII, see next item); one mutilated and damaged folio numbered '184' and used as the back fly-leaf to a *Lectionarium* in ordinary minuscule saec. IX; cut down to 290 × 215 mm. <250-260 × 200-205 mm.> in 30 long lines. Punctuation: a medial point surmounted by a long, curving comma indicates the main pause, and a comma-like point indicates other pauses. Abbreviations: **q** with oblique stroke through the descender = *que*, the normal symbol for 'per', and the usual *Nomina Sacra*. Omitted **M** is indicated by a wavy line over the vowel. Spelling: confusion of **e** and **i** ('*eregere*') and of **o** and **u** ('*agnuscebam*', '*cognuscit*'). Script is an ungainly uncial of irregular size and shape with letters sometimes wandering from the imaginary base-line: **A** is usually smaller than other letters; descenders of **F** and **P** extend into the line below; the oblique stroke of **N** is sometimes almost horizontal; the bow of **R** is usually open; the top of **T** forms a loop at the left, and the shaft terminates in a curve to the right; the second stroke of **X** extends considerably below the base-line.

Written in Northern Italy, probably at Verona. Perhaps served as a paste-down for the original covers (now removed) of the main manuscript, which was No. 25 in the Bobbio inventory of 1461.

Our plate from fol. 184r.

*Bibliography:* M. Ferrari, "In margine ai Codices latini antiquiores: spigolature ambrosiane del sec. VIII" in *Lateinische Kultur im VIII. Jahrhundert: Traube-Gedenkschrift*, ed. A. Lehner and W. Berschin (St. Ottilien, 1989), 73-77 with pl. 3 (detail of fol. 184r).

1877. — MILAN, BIBLIOTECA AMBROSIANA **C 228 inf.** (fol. 184).

UNCIAL SAEC. VI-VII.

¶ ACTA S. ANDRAEAE.

Palimpsest, lower script (for the upper script, Gregorius M., *Moralia in Iob* in uncial saec. VIII<sup>1</sup>, see preceding item); one mutilated folio, now cut down to 290 × 215 mm. <225 × 175-185 mm.> in 2 columns of 26 lines. Ruling on the hair-side (direct impression). Single bounding lines. No punctuation seen. The only abbreviation may be one instance of **q** followed by a sinuous stroke = -que. Script is a calligraphic uncial but not of the oldest type: the bow of **A** is somewhat pointed and lifted; the bows of **D**, **P**, and **R** are open; the hairline tongue of **e** projects well beyond the upper curve; the oblique of **N** starts low, the first stroke often extending below the baseline.

Origin uncertain, presumably Italy. For its former use in the main manuscript, see the preceding item.

Our plate from the recto (see the preceding item).

*Bibliography:* M. Ferrari, "In margine ai Codices latini antiquiores: spigolature ambrosiane del sec. VIII" in *Lateinische Kultur im VIII. Jahrhundert: Traube-Gedenkschrift*, ed. A. Lehner and W. Berschin (St. Ottilien, 1989), 73-75, 77-78 with pl. 3 (detail of fol. 184r).

1878. — MILAN, BIBLIOTECA AMBROSIANA **S.P. 57 bis.**

PRE-CAROLINE MINUSCULE SAEC. VIII ex.

¶ 'AMBROSIASTER' IN EPISTULAS PAULI AD CORINTHIOS.

Parts of five leaves from two non-consecutive quaternions survive in eight fragments numbered 1-16; present measurements: 120-130 × 170-215 mm. <estimated written space 260-270 × 190-195 mm.> in an estimated 26 or 27 long lines of which 9-11 survive. Ruling: four (or two?) bifolia at a time. Flesh-side on the outside of the quire; within the quire, hair faces flesh. Double bounding lines. Prickings not seen. Biblical lemmata in half-uncial resembling that in *C.L.A.* VI. 742b or in uncial or in text-script. Running titles (and perhaps quire numbers—cf. 'XX' on fragm. 16) added saec. XII



when the codex was still complete. Punctuation: a long sinuous comma or semicolon marks the main pause, a medial point often surmounted or continued by an oblique stroke marks lesser pauses. Abbreviations include **-b;**, **-b:**, **-b3** = **-bus**, **-q;** = **-que**; **q;**, **q3** = **quae vel quia**; the normal symbols for 'per', 'prae', 'pro'; and the usual Nomina Sacra. Omitted **m** is indicated by an oblique flourish or reverse s-curve (both are also used for the general abbreviation-stroke). Spelling shows some confusion of **e** and **i**, confusion of **o** and **u**, and the omission of **h**. Red ink used for lemmata, majuscule text letters, and the large initial with leaf motifs in fragm. 9. Text ink brown. Script, by two hands, is a pre-Caroline minuscule with some affinity to the Corbie **ab**-type: **a** has three forms (**œ**, **æ**, **ie**); **l** and the shaft of **b** often break towards the foot; the shaft of **d** usually extends below the bow; the ascender of **h** sometimes inclines to the left; **o** usually resembles uncial **D** with the ascender curving to the right; **r** and **s** do not descend below the base-line.

Written in North France. Removed from a binding. The fragments were studied by Pietro Mazzucchelli, who was associated from 1787 to 1829 with the Biblioteca Ambrosiana in various capacities, finally as Prefect.

Our plate from fragm. 7.

*Bibliography*: M. Ferrari, "In margine ai Codices latini antiquiores: spigolature ambrosiane del sec. VIII" in *Lateinische Kultur im VIII. Jahrhundert: Traube-Gedenkschrift*, ed. A. Lehner and W. Berschin (St. Ottilien, 1989), 69-73 with pl. 2 (details of fragments 7 and 9).

1879. — MONTE CASSINO, ARCHIVIO DELLA BADIA COMPACTIO-  
TIONES VII (offsets) + XXII (offsets).

UNCIAL SAEC. VIII (?).

¶ FRAGMENTUM OPERIS INCERTI.

Offsets from binding strips seen on one leaf (numbered '13' in pencil) in Compactio VII and on two leaves (numbered '16' and '17' in pencil and removed from Compactio VII) now in Compactio XXII; the three leaves, all from the same gathering, contain a Missal in Beneventan minuscule saec. XII. Maximum measurements of the offsets 28 × 60 mm., traces of 3 lines surviving. Punctuation: only the point is discernible. No abbreviations seen. Script is a graceful uncial: the bow of **A** is small and angular; the lower bow of **B** is larger than the upper; the hasta of **E** is central; the first bow of **M** is closed, and the second curves inward; **N** has the minuscule form once; the top of **T** has a hook at the left or at both ends.

Origin uncertain, presumably Italy.

Our plate from *Compactio* XXII, fol. 17.

1880. — MÜNSTER IN WESTPHALIA, UNIVERSITÄTSBIBLIOTHEK  
FRAGMENTENSAMMLUNG IV, 8.

ANGLO-SAXON MAJUSCULE SAEC. VIII<sup>1</sup>.

¶ SACRAMENTARIUM GELASIANUM MIXTUM.

One heavily damaged and mutilated bifolium; present measurements of the second leaf 272 × 247 mm. <255 × 185 mm.> in 2 columns of 24 lines (the entire outer column and an edge of the inner column of the first leaf are missing). Ruling after folding, as pricking slits are seen in both margins. Punctuation: a point indicates various pauses; a point and long angular comma at the end of a prayer. Accents over some monosyllables. Abbreviations:  $\bar{p}$  = prae (the only occurrence is at line-end); the normal Nomina Sacra and liturgical terms. Spelling good on the whole, but some confusion of *e* and *i* ('mereta', 'tradedisti'). Large typically Insular initials, sometimes followed by decorative capitals, begin prayers. Ink dark. Membrane thin. Script is a handsome Anglo-Saxon majuscule: normally *d* has the minuscule form, *N*, *R*, and *S* the uncial; *i*-longa is used occasionally; the top stroke of *g* and *T* and the ascender of uncial *D* have a triangular finial at the left.

Written in Northumbria. Formerly used as a binding. A note in sixteenth-century writing on fols. 1v-2r connects the fragment with Werden ("Ego frater Iohannes Assindie dictus prior [1517-42] in Werden profiteor manu propria quod hunc librum qui dicitur Smagaddus super regulam sanctissimi patris nostri Benedicti accepi accommodatu[m] a domino venerando Gerhardo abbate [1507-47] sanctissimi Martini in colonia . . .").

Our plate from fol. 2r.

*Bibliography:* K. Gamber et al., *Codices liturgici latini antiquiores/Supplementum: Ergänzungs- und Registerband*, Spicilegii Friburgensis Subsidia 1A (Fribourg, 1988), p. 50 (under no. 235).

1881. — OXFORD, BODLEIAN LIBRARY D'ORVILLE 175 [17053]  
(fols. 18, 23).

UNCIAL SAEC. VIII.

¶ SACRAMENTARIUM.

Palimpsest, lower script (the upper script contains Lucanus, *Bellum civile* in minuscule saec. XII); one bifolium foliated '18' and '23' (the manuscript

also contains many other palimpsest leaves, with the lower scripts post A.D. 800). Writing seen most clearly on fol. 18v: ca. 220 × 148 mm. <ca. 175 × 110-115 mm.> in 30 long lines. The lower script visible on fol. 23r seems to be Caroline minuscule saec. ix (fol. 23v is indecipherable). No punctuation visible. Single abbreviation seen: **ōmps** = omnipotens. Traces of two initials. Script is an irregular uncial written sometimes above, sometimes on the base-line: the bow of **A** may be round or pointed; the tail of **G** descends with a leftward swing; the first loop of **M** is closed; the second upright of **N** is often comma-shaped and meets the oblique above the base-line; the head of **T** may end with a downward hook at one or both ends.

Origin uncertain.

Our plate from fol. 18v.

1882. — PARIS, BIBLIOTHÈQUE NATIONALE LAT. 4411.

PRE-CAROLINE MINUSCULE SAEC. VIII<sup>2</sup>.

¶ LEX ROMANA VISIGOTHORUM (mutil. in fin.).

Fols. V + 192 + V (fol. 192 is blank); cut down to 236 × 169 mm. <197 × 134 mm.> in 23-25 long lines. Ruling normally on the hair-side, 4 bifolia at a time before folding, with the direct impression on the outside bifolium. Double bounding lines on fols. 1-9v, single elsewhere. Prickings in the outer margin guided the ruling. Gatherings normally of eight, with hair-side usually outside, arranged in many instances so that hair faces flesh within the quire. Display capitals used for incipits and explicits on fols. 10 and 14v are reminiscent of Merovingian manuscripts. Titles mostly in uncial. Dates and addresses in uncial or minuscule or Merovingian cursive. Some running titles in minuscule. Punctuation: the medial point for various pauses. Abbreviations include **-b;**, **-q;** = -bus, -que; **ē** = est; the normal symbols for 'per', 'prae', 'pro'; and recurrent technical and legal terms. Omitted **m** is indicated by a horizontal flourish over the vowel; **n** by **N** turned sideways, resembling **z** (other examples found in *C.L.A.* VI. 707 and VIII. 1096 [with plate]). Membrane is parchment. Ink brown. Spelling shows frequent **ci** for soft **ti**, confusion of **e** and **i**, and confusion of **o** and **u**. Script, by more than one hand, is a distinct type of pre-Caroline minuscule: **a** has several forms—**æ**, **oc**, a form approaching the Corbie **ab**-type, and the normal Caroline minuscule form (often at the beginning of words with pointed bow and long hair-stroke descending well below the base-line); here and there **b** with a tag to the right; uncial forms of **d**, **g** and **n**, and occasionally uncial **R**, occur in the minuscule; some lines are written entirely in uncial; the shaft of **h** sometimes leans to the left; the

final stroke of **m** often turns inward and may even go below the baseline; numerous ligatures (**ct** is noteworthy); in some instances the script approaches the Corbie **ab**-type or exhibits the knob-like finials of the Maurdramnus type (see plate). Some contemporary corrections.

Written in North France, to judge from the script. Was No. 4209 in the Colbert collection and No. 5185 in the Royal collection.

Our plate from fol. 41r.

*Bibliography:* G. Dolezalek, *Verzeichnis der Handschriften zum römischen Recht bis 1600*, vol. 2 (Frankfurt, 1972), no pagination.

# 1883. — SOLOTHURN, STAATSARCHIV HANDSCHRIFTENSAMM- LUNG 1.

RHAETIAN MINUSCULE SAEC. VIII-IX.

¶ HIERONYMUS, COMMENTARIUS IN MICHAELAM (II. v. 2-3, 4, vii. 1/4-5/7, 8/13-14/17, 14/17-18/20).

Two damaged and mutilated bifolia from the centre of consecutive quires and 3 scraps in poor condition, two of which join to form the lower part of one folio from the second quire; maximum measurements of one leaf are 306 × 243 mm. <244 × 185 mm.> in 2 columns of 29 lines. Ruling before folding, on flesh- or hair-side. Double bounding lines at the outer margin of each column, single at the inner, with an extra line in the intercolumnium. Prickings in the outer margin guided the ruling. Running titles in uncial mixed with minuscule and washed with yellow. Punctuation: the main pause is indicated by a semicolon or point, lesser pauses by a medial point. Citations marked by pairs of commas placed in either margin. Abbreviations include **aū** = autem; **-b**, **-q** = -bus, -que; **ē** = est; ordinary abbreviations for 'per', 'prae', 'pro'; **q:** = quae; **qn̄m** = quoniam; and the normal Nomina Sacra. Spelling good. Membranes are parchment. Script is of the Rhaetian type with pronounced and sometimes erroneous separation of letters and words: the characteristic form of **a** is used regularly; the characteristic and Caroline forms of **t** occur, with the former predominating; uncial and minuscule **d** are used indifferently; the shaft of **h** leans to the left; ligatures frequently used are **en**, **re**, **ri**, and **st**. Some contemporary corrections made suprascript or placed in the margin with *signes de renvoi*.

Written in a Rhaetian centre. Formerly used as bindings.

Our plate from fol. 2v of the second bifolium.

*Bibliography:* A. Kocher, *Mittelalterliche Handschriften aus dem Staatsarchiv Solothurn*, Veröffentlichungen des Solothurner Staatsarchives 7 (Solothurn, 1974), 6-7 with fig. on 7 (col. b of our fol. 2v).

1884. — VATICAN CITY, BIBLIOTECA APOSTOLICA VATICANA  
VATIC. LAT. 15204 (fol. 5A).

UNCIAL SAEC. VII-VIII.

¶ GREGORIUS M., HOMILIAE IN EVANGELIA (XXVIII. 2-3).

Three heavily damaged scraps labelled 'c', 'd', and 'e', now kept in a miscellany of fragments; scraps c and e come from the lower part of one leaf (scrap d is mostly illegible, and its text cannot be determined with certainty); maximum measurements 60 × 95 mm. in 2 columns, with parts of 4 lines surviving. Double bounding lines enclose each column. Abbreviations: **-b**; = -bus; **ē** = est; **dm** = deum; **dñs** = dominus. Omitted **M** (not restricted to line-end) is indicated by a simple stroke over the vowel. A capital letter almost two text-lines in height begins a section; larger letters begin sentences. Membrane is parchment. Ink dark brown. Script is a bold uncial: the bow of **A** is shallow and made with thin strokes; the foot of **L** has a finial descending below the line; **LL** run together; the first bow of **M** is closed; the oblique of **N** begins low and extends beyond the comma-like second upright; the bow of **R** is open and in one instance descends almost to the base-line; **S** is top-heavy; the topstroke of **T** begins with a loop.

Origin presumably Italy. Removed from the binding of a printed book according to a note of Federico Patetta on fol. 5 ("dalla rilegatura di un libro stampato a Venezia, Aldo, 1498").

Our plate shows the verso of fragm. c.

## II

## NEW MEMBRA DISIECTA

**\*\*II.** 163 + V, p. 49 + S, p. 24. CAMBRIDGE (MASS.), HARVARD UNIVERSITY, HOUGHTON LIBRARY **MS TYP 592** (olim CHELTENHAM, PHILLIPPS COLLECTION **36184**) + LONDON, BRITISH LIBRARY **ADDITIONAL MS. 11878** + **ADDITIONAL MS. 41567 J** + PARIS, BIBLIOTHÈQUE NATIONALE **NOUV. ACQ. LAT. 2243** (fols. 1-2) + **NOUV. ACQ. LAT. 2388** (fols. 1-2). — Gregorius M., *Moralia in Iob* (xxiii. 1-xxiv. 51). Luxeuil minuscule saec. viii in. — Another bifolium is now in OSLO/LONDON, THE SCHØYEN COLLECTION **MS 1361** (acquired from the Paris bookseller Pierre Berès in the sale of 10 June 1991—see our reference to this item in the first set of Addenda, pp. 350-51). Present measurements: 228 × 145 mm. <169 × 100 mm.> in 18 long lines. In the quire Paris nouv. acq. lat. 2243, with xxiv. ll. 32-34, formerly occupied the central position; next to it was the new bifolium, which contains xxiv. ll. 32, 34-12.36. Contrary to what was stated in the main entry, the gap between London Add. 41567 J and Paris nouv. acq. lat. 2243 consisted of 2 bifolia (not 2 folios).

**\*\*VIII.** 1042 + X, p. 27. BERLIN, ÄGYPTISCHES MUSEUM, PAPYRUSSAMMLUNG **PAP. BEROL. 11753** + VIENNA, ÖSTERREICHISCHE NATIONALBIBLIOTHEK, PAPYRUSSAMMLUNG **L. 90**. — Fragmentum de Formula Fabiana. Early half-uncial saec. iv. — Two new fragments in BERLIN, ÄGYPTISCHES MUSEUM, PAPYRUSSAMMLUNG **PAP. BEROL. 21294**; (fragm. A) 17 × 29 mm., with parts of 3 lines surviving and (fragm. B) 42 × 16 mm., with parts of 9 lines surviving. Provenance unknown. Fragm. A joins directly with two of the fragments in Pap. Berol. 11753. Cf. W. Brashear, "Potpourri," *Archiv für Papyrusforschung* 34 (1988): 12-13, no. 8 and figs. 10-13 (complete facsimile).

**\*\*VIII.** 1191. ERLANGEN, UNIVERSITÄTSBIBLIOTHEK **2112**, **21** + GÖTTINGEN, UNIVERSITÄTSBIBLIOTHEK **HIST. NAT. 91**. — Dioscorides Latinus (fragm.). Pre-Caroline minuscule saec. viii<sup>2</sup>. — Two mutilated and damaged bifolia, now NUREMBERG, STADTBIBLIOTHEK **FRAGM. LAT. 2 a**, contain parts of books ii and iii. Formerly pasted

to the front and back covers of Nuremberg, Stadtbibliothek Cent. I, 43 (Origenes, *Homiliae* copied in 1502). Cf. K. Schneider, *Die lateinischen mittelalterlichen Handschriften: Theologische Handschriften*, vol. 2.1 of *Die Handschriften der Stadtbibliothek Nürnberg* (Wiesbaden, 1967), 45-46.

**\*\*IX. 1233 + S, p. 4. MÜNSTER IN WESTPHALIA, STAATSARCHIV MSC. I. 243 + BÜCKEBURG, NIEDERSÄCHSISCHES STAATS-ARCHIV DEPOT 3 (FREIHERRLICH V. MÜNCHHAUSEN'SCHES ARCHIV ZU APELERN).** — Beda de Ratione Temporum (capp. 46-50); Dionysius Exiguus, *Cyclus Paschalis* (A.D. 589-740) cum Notis Historicis. Uncial saec. viii<sup>1</sup>. — Five rectangular cuttings, from two leaves, in BRAUN-SCHWEIG, STADTBIBLIOTHEK FRAGM. 70 contain Beda de Ratione Temporum (capp. 56-59, 63-64); height of one reconstructed leaf ca. 340 mm., with parts of 30 long lines.

**\*\*IX. 1245. MUNICH, BAYERISCHE STAATSBIBLIOTHEK CLM 4585 + 4597 + 4606 + 4621 + 4650** (fly-leaves). — *Lectionarium* (fragment). Pre-Caroline minuscule saec. viii<sup>2</sup>. — New fragments are in **CLM 3076, 4760, and 29302/1** (olim **CLM 29163 k**). Clm 29302/1, removed from Cgm 566 (provenance, Benediktbeuern), measures 123 × 110 mm., with parts of 14 lines surviving; the initials show the fish motif. Removed from Cgm 566 (provenance Benediktbeuern). Cf. K. Bierbrauer, *Die vorkarolingischen und karolingischen Handschriften der Bayerischen Staatsbibliothek* (Wiesbaden, 1990), no. 250 and pls. 541-42 (from the recto and verso of Clm 29302/1).

**\*\*IX. 1370. † WEINHEIM, E. FISCHER SAMMLUNG S.N.** — Iustinus, *Epitome historiarum philippicarum* (xxiii. 3 §§ 3-7; xxiii. 4 § 1-xxiv. 1 § 1). Anglo-Saxon minuscule saec. viii med. — The new fragment in **LONDON, BRITISH LIBRARY HARLEY 5915** (fol. 10) contains xxiv. 2 §§ 6-10, 3 §§ 3-8 and is the only part now located of the original manuscript. Present measurements: 195 × 127 mm.; only the outer of 2 columns survives, showing 18 of an estimated 29 lines. There is exact conformity between the London fragment and the missing Weinheim fragment with respect to punctuation, abbreviations, and the script of the text and the marginal notes. The membrane of the London folio is vellum prepared in the Insular manner. Ink black. Formerly used as a cover and now part of a miscellaneous collection of fragments assembled by John Bagford (1650-1715). Cf. J. Crick, "An Anglo-Saxon Fragment of Justinus's *Epitome*," *Anglo-Saxon England* 16 (1987): 181-96 and pl. 8 (fol. 10v).

**\*\*IX. 1372 + XI, p. 4 + S, p. 20. WERTHEIM AM MAIN, FÜRSTLICH LÖWENSTEIN-WERTHEIM-ROSENBERGSCHES ARCHIV**

**FRAGM. 1 (LIT. B. NR. 1686a) + LENINGRAD (ST. PETERSBURG), INSTITUTE OF HISTORY OF THE ACADEMY OF SCIENCES FRAGM. 3/625 + MUNICH, BAYERISCHE STAATSBIBLIOTHEK CLM 29300/4 (olim CLM 29163 b) + WÜRZBURG, UNIVERSITÄTS-BIBLIOTHEK M. P. TH. F. 176 (olim FRAGM. S.N.).** — Sacramentarium Gelasianum. Anglo-Saxon minuscule saec. VIII-IX. — A strip cut horizontally from the central bifolium of a quire in WÜRZBURG, STAATSARCHIV HV FRAGMENTE 1; now measuring 65 × 223 mm. in 2 columns, with parts of 6 and 7 lines surviving. Rubrics in red, in text-script. A human face is enclosed in a D. The new fragment, presently on deposit at the Staatsarchiv, is from the archive of the Historischer Verein von Unterfranken und Aschaffenburg belonging to the Freunde mainfränkischer Kunst und Geschichte e. V.

**\*\*X. 1492. VIENNA, ÖSTERREICHISCHE NATIONALBIBLIOTHEK 954.** Palimpsest, upper script. — Hieronymus, Epistulae, etc. Irish and cursive minuscule saec. VIII. — A new bifolium in MILAN, BIBLIOTECA AMBROSIANA S.P. II.97 (fols. A, B) contains Epistulae patris cuiusdam and Hieronymus, Epistula IX. 1-2; 190 × 125 mm. <165 × 95 mm.> in 20-23 long lines. The same Irish hand that copied fols. 1r-11v in the Vienna portion also wrote fols. Ar-v, Br (upper part) of the Milan fragment; fol. Br (lower part) was copied in the Italian cursive minuscule script of fols. 13v-15r at Vienna (fol. Bv of the Milan fragment is blank). In M. Ferrari's ordering of the texts, fols. A and B constituted fols. 8 and 15 in a gathering of 22 leaves (11 bifolia). The original manuscript may have been registered as No. 93 in the 1461 Bobbio inventory. Cf. M. Ferrari, "In margine ai Codices latini antiquiores: spigolature ambrosiane del sec. VIII" in *Lateinische Kultur im VIII. Jahrhundert: Traube-Gedenkschrift*, ed. A. Lehner and W. Berschin (St. Ottilien, 1989), 60-68 and pl. 1 (fol. Ar).

**\*\*X. 1493. VIENNA, ÖSTERREICHISCHE NATIONALBIBLIOTHEK 954** (fols. 1-6, 10-13). Palimpsest, lower script. — Proverbia Salomonis versionis antehieronymianae (II. 1-IV. 23; XIX. 7-27). Uncial saec. V-VI. — A new leaf folded in two to form a bifolium in MILAN, BIBLIOTECA AMBROSIANA S.P. II.97 (fols. A, B) contains Proverbia Salomonis versionis antehieronymianae XVIII. 9-XIX. 7 (?); 252 × 190 mm. in 27 long lines. Ruling on the flesh-side (direct impression). Double bounding lines in outer margin (inner margin cropped). Running title in small uncial on flesh-side. Cf. M. Ferrari, "In margine ai Codices latini antiquiores: spigolature ambrosiane del sec. VIII" in *Lateinische Kultur im VIII. Jahrhundert:*



*Traube-Gedenkschrift*, ed. A. Lehner and W. Berschin (St. Ottilien, 1989), 60-68 and pl. 1 (fol. Ar).

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## APPENDIX

When we compiled a similar Appendix for our first set of Addenda (A), we noted that it was necessary to do so because of the vicissitudes of the books already described in *C.L.A.* I-XI and *S. C.L.A.* items still continue, of course, to change locations and shelf marks. Some, unfortunately, even disappear while others previously thought to be lost come to light, though admittedly less frequently; two instances are the happy discoveries by Dr. Martin Steinmann and Dr. B. C. Barker-Benfield of the fragments listed below under VIII. \*\*733 and S \*\*1685 respectively. The following list gives various information that has come to our notice since 1985; like its predecessor, it makes no claim to exhaustiveness. The minor corrections supplied in the entries for the new membra disiecta described on pp. 302-5 above are not repeated here.

II. 143. Cheltenham, Philipps Collection 17849: purchased from H. P. Kraus by Peter Ludwig; later Malibu (California), J. Paul Getty Museum, Ludwig XIV 1; purchased jointly by H. P. Kraus and Bernard Quaritch in the Sotheby sale of 6 December 1988 (lot 39) and still (September 1991) owned by these dealers.

II. 259. Geneva, Dr. M. Bodmer Collection S.N. (formerly Cheltenham, Philipps Collection 36183): sold in 1971 to H. P. Kraus, from whom Bernard Quaritch purchased the item in 1976; now Tokyo, Toshiyutzi Takamiya Collection S.N.

III. 278. Ancona, Archivio Capitolare S.N.: now Biblioteca Diocesana S.N.

III. 304. Milan, Biblioteca Ambrosiana Cimelio MS. I: now S.P. 11/1.

IV. 410a-b and 414. Ravenna, Archivio Arcivescovile S.N.: from 1908 to 1957 on deposit, for the purpose of restoration, in the Vatican Library and since returned to Ravenna.

VII. 978a. Chur, Rätisches Museum: now Bischöfliches Archiv BAe 21. (The two leaves, which form part of the Bischöfliches Archiv, Chur, were formerly on deposit in the Rätisches Museum; they were returned on 6 October 1950.)

VIII. \*\*733 (p. 52). (Leipzig, K. W. Hiersemann): now St. Gall, Roland Hartmann Collection S.N. (*teste* M. Steinmann).

VIII. 1133. Fritzlar, Stiftskirche St. Peter, Schatzkammer S.N.: now Dombibliothek 125,1.

VIII. 1164. Cologne, Dombibliothek S.N.: now Erzbischöfliche Diözesan- und Dombibliothek; the fragments could not be located in November 1991 (*teste* J. A. Cervelló-Margalef).

VIII. 1174. Donaueschingen, Fürstlich Fürstenbergische Hofbibliothek 191 (fly-leaf): purchased by the Pax ex Innovatione Foundation in 1982 (see A, p. 363); now Oslo/London, The Schøyen Collection ms 46 (acquired in 1987).

VIII. 1177. Dillingen, Kreis- und Studienbibliothek S.N. + Donaueschingen, Fürstlich Fürstenbergische Hofbibliothek Fragment E. I. 10: the Dillingen fragments now have the shelf mark XV Fragm. 24; the Donaueschingen fragments, purchased by the Pax ex Innovatione Foundation in 1982 (see A, p. 364), were included in the Sotheby sale of 21 June 1988 (lot 49) and are now Champvent (Switzerland), Karl Leister Collection S.N.

VIII. 1193. Freiburg i. Br., Stadtarchiv S.N.; now B 1 Nr. 330.

VIII. 1211. Halberstadt, Bibliothek des Domgymnasiums S.N.: now Domschatz Inv. Nr. 465.

VIII. 1212. Halberstadt, Bibliothek des Domgymnasiums S.N.: now Domschatz Inv. Nr. 466.

VIII. 1217. Heidelberg, Gerhard Eis Sammlung ms. 82: this item, with the same shelf mark, still forms part of the Eis collection (now owned by Dr. Helko Eis, Heidelberg).

IX. 1230. Maria Laach, Stiftsbibliothek S.N.: now FF 100.

IX. 1348. Pappenheim, Gräflisch Pappenheimsches Archiv S.N.: now Nürnberg, Staatsarchiv Einbandfragmente Nr. 16.

IX. 1371. Wertheim am Main, Bibliothek der Pfarrkirche S.N.: now 495.

IX. 1372. Wertheim am Main, Fürstlich Löwenstein-Wertheim-Rosenbergsches Archiv Fragm. 1 (Lit. B. Nr. 1686a): the archive has been sold, and the present location of the leaf formerly in Wertheim is unknown.

Würzburg, Universitätsbibliothek Fragm. S.N.: now M. p. th. f. 176.

IX. 1373. Windsheim, Stadtbibliothek Fragm. S.N.: now Fragm. 1; the fragments have been removed from the glass frame and are presently kept in an envelope.

X. \*\*227 (p. 38). Cairo, Museum of Egyptian Antiquities Pap. 85644 A + B: now located; cf. R. Seider, *Paläographie der lateinischen Papyri* 2.1 (Stuttgart, 1978), no. 38, pp. 98-100 and pl. 21.

X. \*\*1180 (p. 2). Admont, Stiftsbibliothek 244 (fly-leaf): now removed from ms 244 and kept separately as Fragm. C-244.

X. \*\*1337 (p. 2). Admont, Stiftsbibliothek 261 (fly-leaves) + Fragm. 12: the fly-leaves have been removed from ms 261 and are now kept separately as Fragm. C-261/1 and Fragm. C-261/2; Fragm. 12 is now Fragm. B-12. The fragment in Fragm. B-12, containing Ezech. xi. 3-xii. 3 is numbered 'VII', not 'II' as stated in the main entry (*teste* J. Tomaschek).

X. 1569. Cairo, Museum of Egyptian Antiquities Pap. Oxy. 1098: now located (journal d'entrée no. 47435); cf. R. Seider, *Paläographie der lateinischen Papyri* 2.1 (Stuttgart, 1978), no. 28, pp. 79-80 and pl. 16.

XI. 1591. Esztergom, Főszékesegyházi Könyvtár (Archiepiscopal Library) S.N.: the fragment, which could not be located in 1963, is still missing (*teste* E. Mátyás).

XI. 1595 + S, p. 31. Wrocław, Biblioteka Uniwersytecka Fragm. R. 1: now Akc. 1955/2 + Akc. 1969/430 (provisional shelf marks).

XI. 1596. Wrocław, Biblioteka Uniwersytecka Fragm. S.N.: now Akc. 1955/3 (provisional shelf mark).

XI. 1626 and 1627. Barcelona, Biblioteca Capitular S.N.: now Arxiu de la Catedral Codex 120.

XI. 1670. Zara, Franciscan Convent S.N.: missing and presumably lost when the library was destroyed during World War II (*teste* M. Sikić, O.F.M.).

S \*\*1006 (p. 27). Solothurn, Staatsarchiv S.N.: now Handschriftensammlung 2.

S \*\*1181 (p. 9). Fulda, Priesterseminar S.N.: now Ms theol 7/1 (Fragm.).

S \*\*1189 (p. 6). Gerleve (near Koesfeld), Stiftsbibliothek S.N.: read Gerleve (near Billerbeck), Abteibibliothek S.N.

S \*\*1230 (p. 5). Dülken (Rheinland), Katholisches Pfarramt St. Cornelius S.N.: the leaf, which was kept in a fascicle (shelf mark: Akten 74) of miscellaneous fragments, has been missing since at least 1985 (*teste* A. Nabrings). For a transcription and photograph of the leaf, see W. Wüsten, *Beiträge zur Geschichte Dülkens und Umgebung vor allem der Jahre 400 bis 1400 n. Chr.* (Ahlen, [1961]), 113-20 and 2 plates (recto and verso, reduced).

S \*\*1318 (p. 2). Admont, Stiftsbibliothek Fragn. 38: now Fragn. B-38.

S 1672. Aarau, Staatsarchiv des Kantons Aargau, Stift Zurzach, Mappe 3949, Fasz. Nr. 41: missing since at least 1977 (*teste* P. R. Máthé).

S \*\*1685. (Bad Hönningen, Schloss Arenfels): now Tokyo, Toshiyutzi Takamiya Collection S.N.; cf. B. C. Barker-Benfield, "The Werden 'Heptateuch,'" *Anglo-Saxon England* 20 (1991): 43-64 *passim*. The Düsseldorf leaves are now on permanent loan from the City of Düsseldorf to the Universitätsbibliothek Düsseldorf (*ibid.*, 43 n. 2).

S 1698. Fulda, Landesbibliothek Fragn. S.N.: now Fragn. 1.

S 1710. London, Egypt Exploration Society Pap. Ant. S.N.: kept at Oxford, Ashmolean Museum, Papyrology Room.

S 1719. Louvain, Bibliothèque de l'Université Catholique A 34: now Louvain-la-Neuve, Archives de l'Université ms A 34.

S \*\*1721. London, Egypt Exploration Society Pap. Oxy. S.N.: kept at Oxford, Ashmolean Museum, Papyrology Room.

S 1787. Fulda, Priesterseminar Fragn. S.N.: now Ms theol 7/2 (Fragm.).

S 1792. Miskolc, Zrinyi Ilona Secondary School S.N.: transferred and now Lévay József Library S.N.

S 1801. New York, H. P. Kraus: now Oslo/London, The Schøyen Collection ms 30 (acquired in 1987).

S 1805. Regensburg, Church of St. Emmeram, Sacristy S.N.: now Regensburg, Bischöfliches Zentralarchiv Pfarrarchiv St. Emmeram, Fragment Nr. 8.

S 1806. Spangenberg, Pfarrbibliothek S.N.: now Marburg, Hessisches Staatsarchiv 319 Pfarrei Spangenberg Hr Nr. 1.

A 1864. Washington (D. C.), The Folger Shakespeare Library X. d. 536: purchased at the Sotheby sale of 25 June 1985 (lot 50) by the British Rail Pension Fund; sold in 1988 to its present owner, Mr. J. Paul Getty, Jr. (London).

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EVIDENCE FOR THE USE  
OF ADAM OF BUCKFIELD'S WRITINGS AT PARIS:  
A NOTE ON NEW HAVEN, YALE UNIVERSITY,  
HISTORICAL-MEDICAL LIBRARY 12

*Timothy B. Noone*

WRITING in approximately 1249, Adam Marsh could recommend Adam of Buckfield to the attention of the bishop of Lincoln, Robert Grosseteste, for an ecclesiastical preferment on the grounds that Buckfield was one learned in both human and divine matters.<sup>1</sup> Certainly, the wide range and thoroughness of Buckfield's Aristotelian commentaries confirm Adam Marsh's judgment about Buckfield's learning. The large number of surviving manuscripts preserving Buckfield's commentaries on the *libri naturales*, moreover, would seem to indicate that his works were valued as aids in unraveling the meaning of the difficult Latin translations of Aristotle.<sup>2</sup> Yet, apart from the numerous manuscripts containing his works,

<sup>1</sup> "Magistrum Adam de Bokefeld latorem praesentium, quem tam divinorum eloquiorum quam litterarum humanarum professio, reddit commendabilem" (Adam Marsh, Ep. 56, ed. J. S. Brewer, *Monumenta Franciscana*, *Rerum Britannicarum Medii Aevii Scriptores* [London, 1858], 165). Adam of Buckfield was a master of arts at Oxford who taught there in the 1240s. Upon Adam Marsh's recommendation, Buckfield was appointed rector of Iwer, Bucks by Robert Grosseteste. Subsequently, Buckfield was made canon and prebendary of Lincoln. He died sometime between 1278 and 1294. For details on Buckfield's life, see A. B. Emden, *A Biographical Register of the University of Oxford to A.D. 1500*, 3 vols. (Oxford, 1957-59), 1:297. The pioneering work on Buckfield's life and writings is found in a study by Martin Grabmann, "Die Aristoteleskommentatoren Adam von Bockfeld und Adam von Bouchermefort: Die Anfänge der Erklärung des 'neuen Aristoteles' in England" in vol. 2 of *Mittelalterliches Geistesleben: Abhandlungen zur Geschichte der Scholastik und Mystik* (Munich, 1936), 138-82, in which Grabmann still maintained the idea that there were two Adams, one French and the other English. The identity of the two authors was sufficiently demonstrated by Franz Pelster, "Adam von Bockfeld (Bockingfold), ein Oxforder Erklärer des Aristoteles um die Mitte des 13. Jahrhunderts: Sein Leben und seine Schriften," *Scholastik* 11 (1936): 196-224.

Research for this note was conducted during a seminar in paleography and codicology sponsored by the National Endowment for the Humanities at Yale University in the summer of 1989.

<sup>2</sup> Altogether, fifty-six manuscripts containing Adam's commentaries are known. Many of the manuscripts containing Adam's commentaries on Aristotle were described by the late S. H. Thomson in a series of articles. See S. H. Thomson, "A Note on the Works of Magister Adam de Bockfeld (Bouchermefort)," *Medievalia et humanistica* 2 (1944): 55-87; idem, "An

little evidence has been brought forward to show that Adam of Buckfield was influential on subsequent philosophical history. Also puzzling to scholars interested in the influence of Adam's writings is the fact that, although many of Adam's works are preserved in manuscripts either of French origin or of French provenance, little trace of Adam's influence has yet been detected in the commentaries of later Parisian writers such as St. Thomas Aquinas and Siger of Brabant. The present note is intended, first, to furnish evidence found in a manuscript of Parisian origin and provenance, New Haven, Yale University, Medical-Historical Library 12 (=Y), that at least Adam's *Sententia super Metaphysicam* was used at Paris, and, second, to suggest sources where further evidence of Adam's influence might be found.

Since Y has been described numerous times,<sup>3</sup> only a summary description will be attempted here. The manuscript contains nearly all the *corpus vetustius* of the Latin Aristotle, the *Physica* (fols. 3r-74r); *De caelo et mundo* (fols. 74r-131v); *De generatione et corruptione* (fols. 131v-151r); *De anima* (fols. 151v-177r); *Parva naturalia* (fols. 177v-200r); *De differentia spiritus et animae* (fols. 200r-206r); *De plantis* (fol. 206r-v); *De vegetabilibus* (fols. 206v-218r); *Meteorologica* (fols. 218r-251v); *Metaphysica vetustissima* (fols. 251v-260v); *Metaphysica nova* (fols. 261r-331v); the Pseudo-Aristotelian *De causis* (fols. 332r-335v); and the theological tract *De articulis fidei* by Nicolas of Amiens (fols. 335v-341v). The text, written by a single French scribe in a Gothic bookhand of the thirteenth century, is produced in double columns on fine white vellum. At the commencement of each of the treatises composing the volume there are historiated initials on gold backgrounds, and smaller initials, usually in alternating red and blue ink, indicate the divisions within the treatises. The decoration in the codex has been traced to the circle of a workshop that flourished in Paris during the third quarter

Unnoticed MS of Some Works of Magister Adam of Bocfeld," *Medievalia et humanistica* 3 (1945): 132-33; idem, "A Further Note on Master Adam of Bocfeld," *Medievalia et humanistica* 12 (1958): 23-32. Additional manuscripts were discovered by Fr. Louis Bataillon when he was searching for manuscripts preserving the works of St. Thomas Aquinas. See Louis Bataillon, "Adam of Bocfeld: Further Manuscripts," *Medievalia et humanistica* 13 (1960): 35-39. For a handy listing of the manuscripts according to the works preserved in them, see Charles H. Lohr, "Medieval Latin Aristotle Commentaries: Authors A-F," *Traditio* 23 (1967): 317-23.

<sup>3</sup> The codex was first described in George Lacombe et al., *Aristoteles latinus: pars prior* (Rome, 1939), 251, no. 28, but was redescribed by Walter Cahn and James Marrow, "Medieval and Renaissance Manuscripts at Yale: A Selection," *The Yale University Library Gazette* 52 (April, 1978): 196-97; and Barbara A. Shailor, *The Medieval Book: Catalogue of an Exhibition at the Beinecke Rare Book and Manuscript Library, Yale University* (New Haven, 1988), 96-98.

of the thirteenth century.<sup>4</sup> Throughout the volume there are generous margins provided for glosses. Indications of provenance, moreover, can be found within the codex itself. On the opening flyleaf the name of an early owner, "Arnoldus de Machlinia," is written in a fourteenth-century hand, and on the verso of the same flyleaf there is a note of the amount a former owner paid, as well as a fifteenth-century inscription reading "Isti libri naturales deputati sunt ad usum fratris Nicolay de Probstorf et sunt empti pro II marcis argenti."

To this summary description, a few details and corrections should be added. First, on the final folio of the codex (fol. 342r) there are, in a late thirteenth-century hand, notes which may well be excerpts from treatises on natural philosophy and logic: the first of these begins "Porus potest nominare vacuitatem" and ends "actu agens et actu manens ad susceptionem formae agentis"; the second begins "Haec dicta possunt significare potentiam" and ends, after an interval of twenty closely written lines, "Nec est simile de hoc Sortem esse asinum quia Sortes nec de sui natura potest esse asinus nec potest esse asinus per res naturales. Explicit iste tractatus." Second, on the verso of the rear medieval flyleaf one can read, under ultraviolet light, the following notice written in a thirteenth-century French Gothic hand:

Isti libri accomodati sunt <ad> usum fratris Ulrici de Ausa:

Primus *Sententiae*. Item, *Super Sententias* tertium per <?>. Item, *De legenda* <?> Bonaventurae. *De substantia orbis*. Item, sextus Avicennae *De naturalibus*. <*Quaestione*>s disputatae Magistri Bartolomei. Item, Thomae *De anima quaestiones*. XII *Quaestiones*. Item, *Tractatus de naturalibus*.

Third, by way of correction, the version of the *Metaphysica* found on fols. 251v-260v is, indeed, the translation by James of Venice known as the *Metaphysica vetustissima* and not the Moerbecke translation as was incorrectly reported by Cahn and Morrow in their description,<sup>5</sup> while the inscription relating to Nicolaus of Probstorf is a fifteenth-century annotation rather than a thirteenth-century one as was stated in the original description given by George Lacombe for *Aristoteles latinus*.<sup>6</sup> Finally, it should be noted that *Y* is the same manuscript that was formerly housed in the Stiftsbiblio-

<sup>4</sup> Robert Branner, *Manuscript Painting in Paris During the Reign of Saint Louis* (Berkeley and Los Angeles, 1977), 230.

<sup>5</sup> See Gudrun Vuillemin-Diem, ed., *Aristoteles Latinus XXV I-1a: Metaphysica Lib. I-IV.4. Translatio Iacobi . . . et translatio composita* (Leiden, 1970), xxii. Cf. Cahn and Morrow, "Medieval Manuscripts," 196.

<sup>6</sup> Lacombe, *Aristoteles latinus: pars prior*, 251.

thek at Admont as MS 126 and was later identified as "Yalensis, bibl. medica historica, s.n." by the editors of *Aristoteles latinus*.<sup>7</sup>

What may be surmised regarding the dating of the codex, both from the script and the style of decoration, is that it was produced at Paris in the third quarter of the thirteenth century. Insofar as one may read the codex's provenance from its inscriptions and annotations, the codex seems to have remained in Paris throughout the thirteenth century and into the fourteenth, but thereafter it apparently was moved to southern Germany and Austria, possibly by the Nicolaus of Probstorf mentioned in the inscription on the opening flyleaf, where it eventually became part of the Stiftsbibliothek at Admont. Furthermore, one may infer from the *ad usum* annotations that the codex belonged to mendicant friars, probably Franciscans,<sup>8</sup> during the thirteenth century.

Turning to the glosses which surround the text in *Y*, we find the first use of Buckfield's *Sententia* at the opening of the *Metaphysica nova* (fol. 261r; modern *Metaphysica* 2.1 [993a30]). Here, and on many of the folios containing the *Metaphysica nova*, there are three glossing hands taking advantage of the ample space left by the text scribe. Although all three hands belong to the thirteenth century, one French and two English,<sup>9</sup> their relative chronological order may be determined by internal evidence. The French hand, which regularly reproduces Averroes's *Commentarium ver-*

<sup>7</sup> Vuillemin-Diem, *Aristoteles Latinus XXV 1-1a*, xxii.

<sup>8</sup> Two of the items listed in the *ad usum* to Ulricus de AUSA on the verso of the rear medieval flyleaf favor Franciscan rather than Dominican "use": Bonaventure's *Legenda* and the *Quaestiones disputatae* by Bartholomew. The latter are almost certainly the disputed questions of Bartholomew of Bologna, O.F.M., since the note is written in a thirteenth-century hand and Bartholomew of Bologna is the only Bartholomew known to have held disputed questions in that century. Furthermore, the date and place of Bartholomew of Bologna's *Quaestiones* are in keeping with what else we know about the codex; according to P. Glorieux, *Répertoire des maîtres en théologie de Paris au XIII<sup>e</sup> siècle*, 2 vols. (Paris, 1933), 2:108, Bartholomew held his disputations at Paris in 1277. For a brief summary of Bartholomew's life and writings, see Irenaeus Squadrani, "Tractatus De Luce Fr. Bartholomaei de Bononia," *Antonianum* 7 (1932): 201-14. Furthermore, the use of Adam of Buckfield's *Sententia* in the codex itself would also lend support to the hypothesis of Franciscan "use," since Adam is known to have been well-connected to the Oxford Franciscan community (see note 1 above).

Nonetheless, whether the "use" of the codex proves to be Dominican or Franciscan, the curious fact that a book so lavishly illustrated and decorated was part of a mendicant library during the thirteenth century would seem to require a word of explanation. A probable explanation is that the codex first belonged to a *magister artium* who either donated the book to the friars, or, what is more likely, entered the order himself and presented it to his superiors upon entrance.

<sup>9</sup> The author would here like to express his thanks to Prof. Richard Rouse whose practiced eye and intimate knowledge of scripts proved invaluable in distinguishing the pedigrees of the glossing hands.

batim, normally uses both the first stanza lateral margins and the lower margins in an effort to keep the lemmata of Averroes's *Commentarium* as close as possible to the corresponding texts of Aristotle in the primary text (see fols. 262r, 263v, and passim). Yet on fol. 261r the French glossator does not do so, and in the only place where he uses the lateral margin, the lower right-hand quadrant, he writes his comments in the second stanza of the lateral margin rather than in the first, contrary to his usual practice. The explanation for this seems to be that one of the two English glossators, who normally uses the first stanza, prevented the French glossator from putting his text in the first stanza and, hence, must have been earlier. Furthermore, the order of the two English hands may be inferred from the fact that the one English glossator, who adds, as we shall see, a lengthy quotation from Buckfield's *Sententia* in the top margin of fol. 261r, has to compress his comments in the right lateral margin on that same folio in order to avoid confusing them with those of the other English glossator. The probable chronological order of the glossators, accordingly, is as follows: (1) the English literal glossator, whose comments include the interlinear glosses, the remarks in the first stanzas of the lateral margins, and occasional notes in the second stanzas; (2) the other English glossator, who uses the second stanzas of the lateral margins and the top margins for his comments; (3) the French glossator, who simply reports the text of Averroes on the various Aristotelian passages, usually placing his annotation well up both lateral margins in the first stanzas and across the lower margins.

Since the French glossator does not report any of Buckfield's *Sententia*, we may focus our attention on the two English glossators. Let us begin with the earlier glossator who is responsible for the interlinear gloss. A good example illustrating this glossator's use of Buckfield may be seen at the bottom of fol. 261ra, where the *Metaphysica nova* reads "in proverbio dicendo quod nullus ignoret locum ianuae in domo" (993b4-5):

Y, fol. 261ra

Adam of Buckfield, *Sententia super 2  
Metaph.* (Maurer,<sup>10</sup> 101)

Et est quod comprehensio antiquorum  
de veritate similis est ei quod communi-  
ter dicitur. Et est quod nullus ignorat  
ianuam domus eo quod omnibus mani-

<sup>10</sup> Armand Maurer, "Adam of Buckfield, *Sententia super secundum Metaphysicæ*" in *Nine Mediaeval Thinkers: A Collection of Hitherto Unedited Texts*, ed. J. R. O'Donnell (Toronto, 1955), 99-144.



Et tamen *interiora* et *secreta* domus multi ignorant; similiter antiqui habuerunt cognitionem istius veritatis per communia et per exteriora, tamen ignoraverunt *secreta* et *interiora* huius veritatis.

festas est; *interiora* autem domus et *secreta*, quae multo maiora sunt ipsa ianua, bene potest quis ignorare. Similiter, licet unusquisque antiquorum aliquid modicum comprehendat de veritate, tamen nullus eorum sufficienter eam comprehendit.

The substantives *interiora* and *secreta* have been italicized because they indicate that the glossator is using Buckfield's *Sententia* and not Averroes's *Commentarium*, despite Buckfield's often close adherence to the text of Averroes, for Averroes himself makes no mention of *interiora* or *secreta* in his exposition of this Aristotelian lemma:

Et est quod in quolibet genere entium sunt aliqua in respectu eorum quasi ianua domus in respectu domus, in hoc, quod non lateat aliquem, sicut locus forte domus non latet aliquem. Et ista sunt prima cognita naturaliter habita a nobis in quolibet genere entium (Averroes, *Commentarium in 2 Metaph.* 1).<sup>11</sup>

The use of Buckfield's *Sententia* on the part of the second and later English glossator, however, is much more evident and indicates that the second glossator was interested more in Buckfield's general division of the book than in isolated expositions of certain passages. For in the top margin of fol. 261r we find the following lengthy annotation, which is identical, with the exception of a few minor variants, to the opening of Buckfield's commentary on the *Metaphysica nova*:

Y, fol. 261r

Adam of Buckfield, *Sententia super 2 Metaph.* (Maurer, 101)

Supposito secundum Avicennam et Algazalem quod subiectum huius philosophiae sit ens inquantum ens, ad divisionem huius scientiae attendamus quae primo dividitur in duas partes, in proemium et tractatum. Et incipit tractatus

Supposito, ut vult Avicenna et etiam Algazel, quod subiectum huius philosophiae sit ens in quantum ens, ad divisionem huius scientiae attendamus; quae primo dividitur in duas partes, scilicet in prooemium et tractatum. Et incipit trac-

<sup>11</sup> Averroes, *Aristotelis Opera cum Averrois Commentariis*, vol. 8 (Venice, 1552), fol. 14rb; the close adherence of Buckfield's commentary to the text of Averroes has been previously noted by Armand Maurer, "Form and Essence in the Philosophy of St. Thomas," *Mediaeval Studies* 13 (1951): 168 and n. 19 (rpt. in *Being and Knowing: Studies in Thomas Aquinas and Later Medieval Philosophers*, Papers in Mediaeval Studies 10 [Toronto, 1990], 7 and n. 19).

ibi: *Manifestum est quod res*. Et, ut volunt quidam, primus liber huius *metaphysicae novae* non continet nisi partem prooemii; secundum alios dicitur *vetus metaphysica* primus liber et primus *novae metaphysicae* secundus. Sed de hoc non est curandum.

tatus ibi: *Et manifestum est quod res*. Et, ut volunt quidam, primus liber huius *metaphysicae novae* non continet nisi istam partem prooemialem; secundum tamen alios, dicitur *vetus metaphysica* primus liber, et quod in principio *novae metaphysicae* incipit secundus. Sed de hoc non est curandum.<sup>12</sup>

Although the second English glossator's main interest is in Buckfield's *divisio textus*, he does note places in which Buckfield's opinion differs from that of Averroes and places in which Buckfield contributes doxographical information, not reported by Averroes, which could only be otherwise obtained by careful comparison of other sources. An example of the former occurs at *Metaphysica* 2.1 (993b22-23). Unlike Averroes, Buckfield introduces, at this point, a qualification to the sense in which practical science may be said to be for the sake of action:

Y, fol. 261rb

Ibid.

Adam of Buckfield,  
*Sententia super 2*  
*Metaph.* (Maurer, 103)

Commentator: scientia enim operativa quamvis utatur ratione et speculetur de causis, tamen non est digna vocari scientia speculativa (Cf. Averroes, *In 2 Metaph.* 3, fol. 14vb).

Nota: est intelligendum quod licet aliter velit Aristoteles finem scientiae operativae esse bonum, convenienter tamen dicit hic finem eius esse actionem. Actio enim est finis

Et intelligendum est quod licet alibi velit Aristoteles finem scientiae operativae esse bonum, convenienter tamen dicit finem eius esse actionem; actio enim est finis proximus per quem

<sup>12</sup> As noted in the Maurer edition (99), there was a dispute among early Latin commentators regarding where the various book divisions should occur. Behind this dispute was the incompleteness of the early translations: the *metaphysica vetus* contained the first four books up to 4.4 (1007a31); the *metaphysica nova* began its text with book 2, then inserted the second part of book 1.5-10 (987a9-993a27), and recommenced in the usual order with book 3. Since Buckfield is commenting on the *metaphysica nova*, he begins his commentary with book 2, but the confusion of where the work should begin, when combined with other evidence, caused even some later commentators, such as Siger of Brabant, to question the authenticity of book 1. On the various translations of the *Metaphysics*, see Bernard G. Dod, "Aristoteles Latinus" in *The Cambridge History of Later Medieval Philosophy from the Rediscovery of Aristotle to the Disintegration of Scholasticism, 1100-1600*, ed. Norman Kretzmann, Anthony Kenny, and Jan Pinborg (Cambridge, 1982), 77; on the doubts expressed by Siger, see Siger de Brabant, *Quaestiones in Metaphysicam: Édition revue de la reportation de Munich; text inédit de la reportation de Vienne*, ed. William Dunphy, *Philosophes médiévaux* 24 (Louvain-la-neuve, 1981), App. 1, 418.

proximus per quem deven-	devenitur in bonum, quod
nitur in bonum quasi finis	est finis ultimus.
ultimus.	

An example of the second English glossator's use of Buckfield's *Sententia* for gathering doxographical information is also to be found on fol. 261rb in the margin, where the glossator records what Buckfield reported to be the opinion of the Islamic philosopher Algazel regarding the goal of metaphysics:

*Y*, fol. 261rb

Adam of Buckfield, *Sententia super 2 Metaph.* (Maurer, 103)

Est enim, vult Algazel, principaliter intentio in hac philosophia cognitio gubernationis Dei altissimi qui est summa veritas.

Cum igitur in hac philosophia consideretur de veritate (est enim, ut vult Algazel, principaliter intentio in hac philosophia cognitio gubernationis Dei altissimi, qui est summa veritas), rectum est istam philosophiam sub speculativa contineri.

What do the annotations in *Y* tell us about the influence of Adam of Buckfield's writings? First, they indicate that Buckfield's Aristotelian commentaries were available and being used in Paris during the third quarter of the thirteenth century or shortly thereafter.<sup>13</sup> This finding alone tends to render doubtful the suggestion made by S. H. Thomson that Buckfield may not have finished composing his commentaries until long after his actual

<sup>13</sup> The first of the English glossators regularly adds notes in the margin in which he reports as an *alia translatio* the *Anonyma* version of the *Metaphysica* (see fols. 261vb, 264rb, and passim). Since the *Anonyma* version of the *Metaphysica* saw its predominant use in Paris from 1250 until ca. 1270, when William Moerbeke's translation became available, the use of the *Anonyma* version tends to confirm the dating assigned independently on paleographical and codicological grounds. Furthermore, the absence of any quotations of Albert the Great's or Thomas Aquinas's commentaries would seem to suggest that these writings were unknown to the English glossators, and this would, in turn, indicate that the annotations were made in the decade of the 1260s. On the use of the *Metaphysica anonyma* at Paris, see *Aristoteles Latinus XXV 2: Metaphysica Lib. I-X, XII-XIV. Translatio Anonyma sive "Media,"* ed. Gudrun Vuillemin-Diem (Leiden, 1976), xxxiv. For the dating of Albert the Great's *Metaphysica*, see Albertus Magnus, *Metaphysica*, ed. B. Geyer in *Opera omnia*, vol. 16.1 (Münster i. W., 1960), x; for the dating of St. Thomas's commentary, see James A. Weisheipl, *Fr. Thomas d'Aquino: His Life, Thought and Works* (Garden City, N.Y., 1974), 379. Only the French glossator seems to know the commentaries by St. Thomas Aquinas; he transcribes the prologue of Aquinas's *Expositio in librum De causis* onto the margin above the incipit of the *Liber de causis* on fol. 332ra.

career at Oxford, perhaps as late as the 1270s.<sup>14</sup> Second, they suggest the type of source that scholars interested in Buckfield's influence should be studying. The annotations in *Y* are in a master's copy of the Aristotelian corpus and not in an independent treatise. What this suggests is that until Buckfield's expositions were superseded by more magisterial writings such as the commentaries of St. Albert the Great, St. Thomas Aquinas, and Siger of Brabant, arts masters found Buckfield's writings to be handy source materials for expounding Aristotle and for presenting in an orderly fashion the sometimes bewildering sequence of treatises such as the *Metaphysics*. Hence scholars should perhaps spend less time looking for quotations of Buckfield's works in commentaries by other authors on the Aristotelian treatises and more time examining manuscripts containing arts masters' glosses, where, if the glosses of *Y* are any indication, Buckfield's commentaries had their primary influence.

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<sup>14</sup> See Thomson, "A Note on the Works of Magister Adam de Bocfeld," 81. But both Fernand Van Steenberghen (*Aristotle in the West: The Origins of Latin Aristotelianism*, trans. Leonard Johnston [Louvain, 1955; rpt. 1970], 140-43) and Daniel A. Callus ("The Subject-Matter of Metaphysics According to Some Thirteenth-Century Oxford Masters" in *Die Metaphysik im Mittelalter: Ihr Ursprung und ihre Bedeutung*, vol. 2 of *Miscellanea mediaevalia*, ed. Paul Wilpert [Berlin, 1963], 397) place Buckfield's writings in the period of his lectureship at Oxford, i.e., ca. 1240-50.

WHAT'S IN A PEDIGREE?  
ALCIMUS AVITUS, *DE SPIR. HIST. GEST.* 2.50-52,  
AND JUVENAL, *SAT.* 8.140-41

*John Magee*

THE second book, "De originali peccato," of Avitus of Vienne's *De spiritalis historiae gestis*<sup>1</sup> tells the story of the Fall of Man, and it begins with a description of the angelic bliss of Paradise.<sup>2</sup> Then, in preparation for the resumption of the main narrative, Avitus intercalates the Lucifer *aition*, pointing out that who among angels originally stood first in the order of creation thereafter bore commensurate accountability for his sin. Of concern to the present discussion is the *sententia* articulated in lines 50-52, following Lucifer's soliloquy:

. . . "Divinum consequar, inquit,  
nomen et aeternam ponam super aethera sedem  
excelso similis summis nec viribus inpar."  
Talia iactantem praeclsa potentia caelo  
iecit et eiectum prisco spoliavit honore.  
Quique creaturae praefulsit in ordine primus,  
primas venturo pendet sub iudice poenas.  
Quandoquidem gravior talem sententia punit,  
quem mirum cecidisse putes; *nam crimen acerbat*  
*auctor, in ignoto*<sup>3</sup> *minor est peccante reatus*  
*durius atque malum, quod maior fecit, habetur* (42-52).

<sup>1</sup> *Alcimi Ecdicii Aviti Viennensis episcopi Opera quae supersunt*, ed. R. Peiper, MGH Auctores Antiquissimi 6.2 (Berlin, 1883), 212-23. The "title" of the poem is Avitus's own (*Ep.* 51, p. 80.21). See W. Ehlers, "Bibelszenen in epischer Gestalt: Ein Beitrag zu Alcimus Avitus," *Vigiliae Christianae* 39 (1985): 353 and 366 n. 3. The poem was composed shortly after A.D. 500; see D. Kartschoke, *Bibeldichtung: Studien zur Geschichte der epischen Bibel-paraphrase von Juvenius bis Otfrid von Weissenburg* (Munich, 1975), 51. Unless otherwise indicated, all references are to "De originali peccato" (bk. 2).

<sup>2</sup> 1-34. The first book, "De mundi initio," ends with the extended Paradise ekphrasis (*Est locus*, 1.193-298), followed by the divine prohibition (1.299-319).

<sup>3</sup> The variant "ignaro" (corrected in *G*) is without support, although it could in fact amount to the same thing as "ignoto" (cf. Propertius 3.18.29; Vergil, *Aen.* 10.706, with Servius ad loc., ed. G. Thilo and H. Hagen, *Servii Grammatici qui feruntur in Vergilii Carmina Commentarii*, 3 vols. [Leipzig, 1881-87; rpt. Hildesheim, 1961], 2:461). Interpreted literally, "ignaro . . . peccante" obviously runs against the *ratio et res ipsa*.

As Friedländer noticed,<sup>4</sup> virtually the same aphorism is found in Juvenal's eighth *Satire*, vv. 140-41:

Omne animi vitium tanto conspectius in se  
*crimen habet, quanto maior qui peccat habetur.*

But since similar sentences are found in Salvianus,<sup>5</sup>

An meliores simus barbaris, iam videbimus: certe, quod non dubium est, meliores esse debemus. Et hoc ipso utique deteriores sumus, si meliores non sumus, qui meliores esse debemus: *criminosior enim culpa est, ubi honestior status*. Si honoratior est persona peccantis, peccati quoque *maior* invidia,

in Sallust,<sup>6</sup>

Nam *quanto* vita illorum praeclarius, *tanto* horum socordia flagitiosior. Et profecto ita se res habet: maiorum gloria posteris quasi lumen est, neque bona neque mala eorum in occulto patitur,

and, indeed, in the Bible (Sap 6:6),

horrende et cito apparebit vobis quoniam *iudicium durissimum in his qui praesunt* fiet,

the question arises whether Avitus is following Juvenal at all. The *Satires*, we know, were neglected until the fourth century, when they enjoyed a renewed popularity, traces of which survive later in authors of Avitus's time;<sup>7</sup>

<sup>4</sup> L. Friedländer, *D. Junii Iuvenalis Saturarum libri V* (Leipzig, 1895; rpt. Darmstadt, 1967), 416 ad loc. 140 f.; cf. G. Losgar, *Studien zu Alcimus Avitus' Gedicht: "De spiritalis historiae gestis"* (diss., Neuburg, 1903), 14 n. 1; D. J. Nides, ed., *Avitus: The Fall of Man: De spiritalis historiae gestis libri I-III*, Toronto Medieval Latin Texts 16 (Toronto, 1985), 32 ad loc. 51. Knoche suspects the maxim (*D. Iunius Iuvenalis: Saturae*, ed. U. Knoche [Munich, 1950], 80, app. crit. ad loc. 140-41). I have inspected A. E. Housman's personal copies of Juvenal, now housed at Columbia University's Rare Books and Manuscripts Library, in which are noted all passages that Housman queried, and for which he solicited manuscript readings. There are no markings for the lines in question. In fact, the dictum sums up well the accumulated *si* of 127 f. (thrice), which is answered by *quod si*, 135 f. (thrice).

<sup>5</sup> Salvianus, *De Gubernatione Dei* 4.12.57, ed. C. Halm, *Salviani presbyteri Massiliensis Libri qui supersunt*, MGH Auctores Antiquissimi 1.1 (Berlin, 1877), 47.24-27. Noted also by Friedländer, *Saturarum libri V*, 416 ad loc. 139.

<sup>6</sup> Sallust, *Iug.* 85.22-23; cf. *Cat.* 51.12 (with Kurfess, ad loc.). A more general parallel, in Cicero (*Off.* 2.13.44), has been noted by E. Courtney, *A Commentary on the Satires of Juvenal* (London, 1980), 405 ad loc. 140-41.

<sup>7</sup> Amm. Marc. 28.4.14. Cf. A. D. E. Cameron, "Literary Allusions in the Historia Augusta," *Hermes: Zeitschrift für klassische Philologie* 92 (1964): 363-77; R. Syme, *Ammianus and the Historia Augusta* (Oxford, 1968), 84-88; P. Wessner, "Lucan, Statius und Juvenal bei den römischen Grammatikern," *Philologische Wochenschrift* 49 (1929): 296-303, 328-35; G. Hight, *Juvenal the Satirist: A Study* (Oxford, 1954), 180-90, 301 n. 24; D. S. Wiesen, *St. Jerome as a Satirist: A Study in Christian Latin Thought and Letters*, Cornell Studies in Classical Philology 34 (Ithaca, 1964), 9 f. The *Satires* were quoted by Sidonius Apollinaris, Ennodius, Boethius, Caesarius, Priscian, etc.; the eighth in particular, by Prudentius (C.

and contrary to Knoche, recent research indicates that they were studied in Merovingian Gaul after his death.<sup>8</sup> Precise evidence for Avitus's knowledge of the *Satires* is on the whole strong, although somewhat uneven. Peiper's only parallel besides the above-mentioned is unconvincing:

Juv. 4.110: Pompeius tenui iugulos aperire susurro  
 Avit. 2.204: talia fallaci spondentem dona *susurro*.<sup>9</sup>

Equally unconvincing is a parallel noted by Losgar:<sup>10</sup>

Juv. 10.183: mitius id sane, quod non et stigmatē dignum  
 Avit. 3.9: signatam fixo peccati *stigmatē* carnem.

Another, observed by Highet,<sup>11</sup> is only slightly less so:

Juv. 6.223: hoc volo, sic iubeo, sit pro ratione voluntas  
 Avit. 4.13: credit et propria valuit *pro lege voluntas*.

A fourth (also remarked by Highet), however, can only be an imitation of Juvenal:

Juv. 2.85: frontibus et toto posuere monilia collo  
 Avit. 6.35: non tibi gemmato *posuere monilia collo*.

And finally, the following too must be echoes:<sup>12</sup>

Juv. 1.85: quidquid agunt homines, votum, timor, ira, voluptas  
 Avit. 1.1: *quidquid agit* varios *humana in gente* labores  
 Avit. 2.31: cessabit gemitus, luxus, metus, *ira, voluptas*.

(We shall return to the latter presently.) In our aphorism, the words "maior . . . habetur"<sup>13</sup> point unambiguously to Juvenal rather than to either Salvianus or Sallust. Of the latter, Sallust shows an affinity with Juvenal ("quanto . . . tanto"), but none with Avitus. Salvianus's dictum is parallel to the others in the general thought but is otherwise formulated along independent lines; and, apart from *durius* / *durissimum*, the same may be said of Sap 6:6. The combined evidence, then, gives certainty to the conclusion that Avitus's *sententia* is an allusion to Juvenal. Discussion would

*Symm.* 2.556 ff. = 8.3 f.), Priscian (18.30.292, Keil, *Gramm. Lat.* 3:364.21-22 = 8.142), and the anon. *Querolus* (*Aulularia sive Querolus*, ed. R. Peiper [Leipzig, 1875], 32.14 f. = 8.129 f.).

<sup>8</sup> J. A. Willis, "Venantius Fortunatus Iuvenalis Lector," *Mnemosyne*, 4th ser., 41 (1988): 122-23.

<sup>9</sup> Avitus, *Opera*, 303 ad loc. 2.204 (index I). Nor is anything proved by the parallel placement of *honori*, Juv. 1.110 = Avit. 2.92, 251 (quoted below).

<sup>10</sup> Losgar, *Studien*, 16.

<sup>11</sup> Highet, *Juvenal*, 301 n. 24.

<sup>12</sup> Cf. Losgar, *Studien*, 28 and n. 1, with mention also of Dracontius.

<sup>13</sup> Also a near metrical equivalent.

end here, were it not for the fact that the dictum evinces a deeper link to Juvenal's *Satire*, in the form of a *Kontrastimitation*.<sup>14</sup> Investigation of this level of the imitation is of intrinsic interest: having ascertained that Avitus is borrowing Juvenal's dictum, we may now ask what he does with it.

*Stemmata quid faciunt?* begins Juvenal (8.1), who then proceeds to answer the question with, in effect, an emphatic *nihil*. He argues that noble lineage cannot be considered an effective deterrent to vice, as a good name passed down from noble ancestry can be, and indeed too often is, sullied by the profligacy of later generations. Virtue alone is nobility,<sup>15</sup> and it is accessible to all who cultivate it, whether noble or ignoble.<sup>16</sup> The butt of Juvenal's invective is the traditional Roman notion that noble blood is a spur to probity and a curb to vice.<sup>17</sup> The *sententia* (140 f.) itself echoes a traditional idea, but one *not* rejected by Juvenal: a vicious life may cast shame upon the forebears of old, but in the end it is the reputation of those very same that haunts its progeny. The more conspicuous the sinner, the more signal his guilt.

Superficially, Avitus appropriates this *sententia* without consideration of its original context: the demise of Lucifer has no obvious connection with the rather Stoic underpinnings of Juvenal's *Satire*.<sup>18</sup> Lucifer's rank, he says, is the measure of his transgression, and the more distinguished the perpetrator the greater the burden of guilt. The adage is well adapted to its new surroundings. Yet a closer look reveals that the dictum, if interpreted according to what Avitus is indirectly saying about the fallen condition of *Man*, has not been divorced of all associations with its original context. The key to this level of interpretation lies in Avitus's implicit refutation of the Pelagian view of sin—an objective targeted already in the proem to "De mundi initio"<sup>19</sup> but a continuing concern in "De originali peccato" as well. The burden of Avitus's polemic is to show (a) that sin is inherited

<sup>14</sup> Cf. generally K. Thraede, "Epos," *Reallexikon für Antike und Christentum* (Stuttgart, 1950-), 5:1039-41; R. Herzog, *Die Biblepik der lateinischen Spätantike: Formgeschichte einer erbaulichen Gattung*, vol. 1, Theorie und Geschichte der Literatur und der schönen Künste 37 (Munich, 1975), 195.

<sup>15</sup> "Nobilitas sola est atque unica virtus" (20). Cf. Avitus, on the occasion of Clovis's conversion (*Ep.* 46, p. 75.13-16): "Vos de toto priscae originis stemmate sola nobilitate contentus, quicquid omne potest fastigium generositatis ornare, prosapiae vestrae a vobis voluistis exurgere. Habetis bonorum auctores, voluistis esse meliorum. Respondetis proavis, quod regnatis in saeculo; instituistis posteris, ut regnetis in caelo."

<sup>16</sup> 231-68.

<sup>17</sup> On the traditional idea cf., e.g., Propertius 4.1.79; 4.11.29-32.

<sup>18</sup> E.g., J. von Arnim, *Stoicorum veterum fragmenta*, 4 vols. (Leipzig, 1903-24; rpt. Stuttgart, 1964), 3:85-86, frags. 349-50. Cf. further Plato, *Th.* 173d6-e1, 175a-b.

<sup>19</sup> 1.1-13 (see pp. 325-26 below).



from Adam, and (b) that judgement therefore is *not* according to merit.<sup>20</sup> Human will, he stresses, has suffered from the Fall, and thus no longer exercises the prelapsarian freedom.<sup>21</sup> Adam and Eve gave themselves into bondage,<sup>22</sup>

et quodcumque malum sollers natura negabat,  
institui dextrisque dedi coniungere laevum.  
Istinc perpetua vosmet mihi sorte dicavi.  
Nec deus in vobis, quamquam formaverit ante,  
iam plus iuris habet: teneat, quod condidit ipse;  
quod docui, meum est; maior mihi portio restat (415-20),

and as a result, their progeny *cannot but sin*.<sup>23</sup> The human stock has been "smitten at the root," its "seed vitiated": in the *primi parentes*<sup>24</sup> all men have sinned.<sup>25</sup>

<sup>20</sup> Cf. D. J. Nodes, "A vitus of Vienne's Spiritual History and the Semipelagian Controversy: The Doctrinal Implications of Books I-III," *Vigiliae Christianae* 38 (1984): 185-95. I avoid the "Semipelagian" question because it is not relevant to the present argument. Avitus lived at the time of the Council of Arles (ca. 475) and died (ca. 518) not very long before the Council of Orange (529). References to Faustus of Riez (*Ep.* 4, pp. 29-32) indicate that he was well aware of the Pelagian "revisionists" active in Southern Gaul; cf. M. Burckhardt, *Die Briefsammlung des Bischofs Avitus von Vienne (d. 518)* (Berlin, 1938), 71 f. (Ado's *Chronicon* [Avitus, *Opera*, 182.13-16] makes reference to Avitus's fourth epistle, not, as was once thought, to a lost treatise on Grace; see M. Schanz, C. Hosius, and G. Krüger, *Geschichte der römischen Literatur bis zum Gesetzgebungswerk des Kaisers Justinian* 4.2 [Munich, 1920], 387 n. 1.) But "Semipelagianism" is a controversial subject, and the shift in emphasis from rejection of the doctrine of corporate sin to rejection of Augustine's elevation of Grace at the expense of free choice of the will (see, e.g., Prosper of Aquitaine, *Ep. ad Augustinum*, PL 51:69) does not directly affect Avitus's tale of *originale peccatum*.

<sup>21</sup> In Paradise: "facilis custodia recti est" (1.318); "libertas securi" (2.2). After the Fall: "nec iam securi . . . luce" (3.8).

<sup>22</sup> I.e., without compulsion: "vestra sed sponte" (270); so also on Lucifer: "via . . . quam sponte cucurri" (114). The tension between human freedom and the inevitability of the Fall is discussed below.

<sup>23</sup> E.g., 3.181-89; 3.334-61 ("De sententia Dei"). Cf. Augustine, *De civitate Dei* 22.30 (ed. B. Dombart and A. Kalb, vol. 2, CCL 48 [Turnhout, 1955], 863-64), in which the *posse non peccare* / *non posse peccare* antithesis implies that the present condition of the *civitas terrena* is to be described as *non posse non peccare*.

<sup>24</sup> "Priscorum . . . parentum" (1.4); "prime pater, qui semine mortis / tollis succiduae vitalia germina proli" (1.7-8); "progeniem sine fine dedi, quam tempore toto / adspicies, generi primus qui poneris auctor" (1.175-76). Cf. Augustine, *De civitate Dei* 13.21 (404.1-2): "primi homines parentes generis humani."

<sup>25</sup> On the metaphor: "radix occisa" (106); "vitiato germine" (277); "vitiatae stirpis origo" (3.391). Cf. Augustine, *De civitate Dei*: "universa massa . . . in vitiata radice damnata est" (14.26, p. 450.51-52); "natura seminalis . . . vitiata . . . radice corrupta" (13.14, pp. 395-96); "quidquid <de> eorum stirpe" (13.3, p. 386.12); "malum, quod . . . in posteros traicerent . . . ex eorum stirpe" (14.10, p. 430.30-31); "ex damnata propagine" (15.1, p. 453.34); "omnem mortalium progeniem fuisse damnatam" (22.22, p. 842.1-2). Cf. also Sedulius, *Paschale Carmen* 2.10 (ed. J. Huemer, CSEL 10 [Vienna, 1885], 44): "clademque a semine sumpsit."

The intended contrast with Juvenal is subtle but unmistakable. For whereas he stresses that it matters not who our forebears are but how we choose to live, Avitus, in the wake of Augustine's struggle against Julian of Eclanum and the synods of Carthage and Ephesus (A.D. 418/431), emphasizes that in this life our freedom of choice is limited *precisely because* of who our forebears are. Juvenal argues for individual, as against ancestral, merit;<sup>26</sup> Avitus, on the other hand, argues for ancestral, as against individual, demerit.<sup>27</sup> The *auctor* has been turned on his head.

Of course, this argument holds only on the supposition that what Avitus says at vv. 50-52 of Lucifer bears some further implication for Man. The evidence supports this supposition, although that is not to suggest that everything Avitus predicates of Lucifer should be understood as applying also to Man, or that anything so predicated should be understood as applying to both in the same way. Avitus's manipulation of the *sententia* functions as follows. The parallel dictum invites the reader to general reflection on the theme of Juvenal's *Satire*, which stands in clear antithesis to what Avitus is saying about the nature and transmission of sin. License to extend the interpretation of the dictum's implication beyond Lucifer to Man is found in the essential unity that Avitus predicates of the respective transgressions of his three characters. This unity is underscored by the extreme imbalance of power that is intimated even before the struggle begins. Lucifer's skill in deceit combined with Man's primordial ignorance makes it clear that as the former falls, so must the latter.<sup>28</sup> Naturally, the biblical basis of the paraphrase determines the outcome of the conflict; but it is in Lucifer's adumbration, indeed his virtual control, of events that Avitus reshapes the biblical tale, giving new dramatic tension to the well-known plot. Thus he significantly retouches Gen 3:6 by making Lucifer (serpent) instead of Eve

<sup>26</sup> See *Sat.* 8.259-60: "et diadema Quirini / et fascis *meruit*, regum ultimus ille bonorum."

<sup>27</sup> See 3.39-40: "Sic miseri mortem nondum discrimine notam, / cum primum *meruere*, volunt." Prosper of Aquitaine takes a middle path. Infants are neither saved nor condemned by the actions of their parents (*Carmen de ingratiss* 629-36, PL 51:127-28). We cannot determine which infants are among the elect, but it is certain that there is one nature common to all, and that it is tainted (852 f.): "nemo etenim, nemo est, qui non cum vulnere primi / sit patris genitus." Cf. Horace, *Sat.* 1.3.68: "nam vitii nemo sine nascitur."

<sup>28</sup> On Lucifer: "Sed quod vivaces pertendit in abdita sensus / quodque futura videt rerumque arcana resinat, / angelici fervens superest natura vigoris. / Horrendum dictu signisque notabile monstrum: / nam quidquid toto dirum committitur orbe, / iste docet scelerumque manus ac tela gubernat / pugnat et occultus per publica crimina latro" (53-59). (Seventeen lines follow, describing Satan's methods of deception.) On Man: "ignara . . . novitas nec conscia fraudis / incautas . . . mentes" (1.322-23); "venturi nescia casus" (2.1); "simplicitas ignara" (99); "rudibus non cognita res est" (sc. mors, 182); "ignorans ludit de morte futura" (216); "ignarus facti . . . Adam" (235-36). Lucifer himself is made to exploit the point in his seduction speech, esp. 189-93.

pick the apple.<sup>29</sup> She submissively accepts it, is momentarily addled by an impulse to resist, but is sandbagged before long by her lack of resolve;<sup>30</sup> Adam, by contrast, is mighty against himself in his very decisiveness.<sup>31</sup> Either way, whither Lucifer leads, Man inevitably follows. Verbal hints as well point up the latent unity of the transgressions. For example, on the motivation:

"*excelso similis summis nec viribus inpar*" (44; *Lucifer's soliloquy*);

*Dis tamen esse cupit similis* (220; *the poet, of Eve before her fall*);

"Sume cibum dulcis vitali ex germine coniunx,  
quod *similem summo* faciet te forte *tonanti*  
numinibusque parem" (242-44; *Eve, to Adam*).<sup>32</sup>

What should have been a paraphrase (220) of Gen 3:5<sup>33</sup> recalls instead Is 14:14<sup>34</sup> by the use of *similis* (+ dat.), which Eve repeats at v. 243 (+ dat. sing.). She also apes Lucifer with the "inpar" / "parem" parallel (+ dat. plur.).<sup>35</sup> The implication of the *contaminatio* is very clear: in Man is the echo of Lucifer. Similarly, on Man's filling the breach left by Lucifer:

. . . et eiectum prisco spoliavit *honore* (46; *the poet, on Lucifer*);

". . . et angelico limus succedit *honori*?" (92; *Lucifer's soliloquy, his envy*);

"... Cur prospera vota moraris  
venturoque diu tempus furaris *honori*?" (250-51; *Eve's seduction of Adam*).<sup>36</sup>

<sup>29</sup> 208-11: "Ille ut vicino victam discrimine sensit, / atque iterum nomen memorans arcem-que deorum / unum de cunctis letali ex arbore malum / detrahit. . . ."

<sup>30</sup> 223-27: "Aestu atque anceps / dividui cordis dura inter proelia fluctus. / Nec tamen inceptor desistit fallere serpens / ostentatque cibum dubiae queriturque morari / *et iuvat* in lapsum *pendentis prona ruinae*." (Eve assists Lucifer in her own fall!) The change of subject is slightly jarring, but evidently no manuscript has an accusative "pronam." The irony ("and she even helps") is intended.

<sup>31</sup> 256-60: "non illum trepidi concussit cura pavoris / nec quantum gustu cunctata est femina primo; / sed sequitur velox miseraeque ex coniugis ore / constanter rapit inconstans dotale venenum / faucibus et patulis inimicas porrigit escas." On the satirical dimension of this scene, see Ehlers, "Bibelszenen," 365.

<sup>32</sup> Cf. 201-2 ("mox purgata tuo facient te lumina visu / aequiparare does"); 294 ("divinis iungi virtutibus et cupientem"). On Avitus's cautious handling of the language, see M. Roberts, "The Prologue to Avitus' *De spiritalis historiae gestis*: Christian Poetry and Poetic License," *Traditio* 36 (1980): 405 and n. 25. Cf. 1.56-57 ("summi . . . imago / numinis," corroborating Roberts's point); 1.138 ("numina vana").

<sup>33</sup> "Et eritis sicut dii" (Vulgate, Vetus Latina).

<sup>34</sup> "Ero similis Altissimo."

<sup>35</sup> Cf. *Ep.* 31 (p. 62.13-14): "Hinc illa sollicitudine priscior constipatio Genavensis, quae in morem originis primae virilibus animis *virus anguis sibilo feminei sermonis* insonuit."

<sup>36</sup> Cf. 1.6 (p. 326 below).

All guilt travels the same path, and Lucifer foresees the infernal fires that he will share with Man:

“Sit comes excidii, subeat consortia poenae  
et, quos *praevideo*, nobiscum dividat ignes.  
Sed nec difficilis fallendi causa petetur:  
*haec* monstranda *via* est, dudum *quam* sponte cucurri  
in pronum lapsus: *quae* me *iactantia* regno  
depulit, *haec* hominem paradisi limine pellet” (111-16).

In his seduction speech this prescience leads him to address Eve with mocking irony as *parens* and *mater*: he knows, whereas she does not, that she will parent the “death” of sin in her progeny.<sup>37</sup> It later counsels him when to suppress and when to flaunt<sup>38</sup> his elation at the human frailty so easily manipulated (“nec difficilis fallendi causa”). Finally, chief among the effects of the Fall, as is illustrated in the excursus, vv. 277-407, is man’s superstitious desire for knowledge of the *arcana*,<sup>39</sup> which very knowledge, of course, is the principal power remaining to Lucifer after his own fall.<sup>40</sup> The connection between the human fault and Lucifer is further intimated in the remarks on the Marsi (303-16), as fallen man has a fatal proclivity not only for investigating the *arcana* but for playing with snakes!<sup>41</sup>

The close bond between Lucifer and Man is suggestive of the Augustinian idea that God foresaw that there would be two rather than four *societates*, each a linked community of angels and men.<sup>42</sup> But be that as it may, it is clear in Avitus’s account that the Fall of Man is to be understood as prefigured in and conjoined with that of Lucifer and his host.<sup>43</sup> *Stemmata quid faciunt?* For Avitus, the question of lineage is intimately connected

<sup>37</sup> 147-48: “tu generi ventura parens, te maximus orbis / expectat matrem.” Cf. 314 (“hoc . . . de matre trahunt et origine prima”); 406-7: (“[primaeva virago] quae . . . nondum natam percussit . . . prolem”); 3.102: (“crimen surrexit ab ista”); cf. also n. 24 above. Avitus is paraphrasing Gen 3:20: “et vocavit Adam nomen uxoris suae Hava eo quod mater esset cunctorum viventium.” Cf. 252: “dabat victurae fercula mortis.” Eve brings “living death,” destined to endure—and to conquer (cf. 1.13: “vivit . . . moribunda”). Further, Augustine, *De civitate Dei* 15.22 (p. 487.3-4): “quod malum a sexu femineo causam rursus invenit.”

<sup>38</sup> “Continet hic primum sua gaudia callidus anguis / dissimulatque ferum victoria saeva triumphum” (233-34); “iam non dissimulans, quem presserat ante, triumphum / acrior insultat victis et taliter infit” (410-11).

<sup>39</sup> “Namque hinc posteritas vitiato germine duxit / artibus illicitis cognoscere velle futura / arcanisque sacris tardos inmittere sensus” (277-79), Avitus’s paraphrase of Gen 3:7 (“et aperti sunt oculi amborum”).

<sup>40</sup> See n. 28 above.

<sup>41</sup> 312-13: “Interdum perit incantans, si callida surdus / adiutoris contempsit murmura serpens.”

<sup>42</sup> *De civitate Dei* 11.19 (p. 338.13-16), 33 (pp. 352.6-7, 353.33-34); 12.1 (p. 355.4-10), 23 (p. 380.1-3); 14.11 (p. 431.1-10), 13 (p. 435.51-54).

<sup>43</sup> 84: “et innexam traxit per prona catervam.”

with the necessities enjoined by Original Sin, which is itself the cardinal development in the unfolding of the divine plan. For Juvenal, on the other hand, lineage amounts to little more than a possible pretext for the eschewal of moral responsibility.

Of course one swallow, as Aristotle says, does not make spring; and it will perhaps be objected that this interpretation of an isolated *sententia* begs the question, until a comprehensive understanding of Avitus's use of the technique of *Kontrastimitation* has been established. But such an understanding must be reached inductively, and Avitus is an author still in need of much study. The purpose here is not to draw summary conclusions as to his use of *Kontrastimitation*, nor to elucidate his imitations of Juvenal generally. A brief look at one of the other parallels noted above will suffice to show that we have not been dealing with a verbal reminiscence that has only coincidental thematic connections with its source. The allusion is to Juvenal's programmatic first *Satire*:

Quidquid agunt homines, votum, timor, ira, voluptas,  
gaudia, discursus, nostri farrago libelli est.  
Et quando uberius vitiorum copia? quando  
maior avaritiae patuit sinus? alea quando  
hos animos? (*Sat.* 1.85-89)

Juvenal must write *Satire*, because vice has *just now* reached its zenith,<sup>44</sup> while the poets of the day go on hammering out only tired old themes. As it would be imprudent of him to attack the living, Juvenal will look instead to the aristocracy of the past generation for his material.<sup>45</sup>

Now, it is highly significant in itself that so much of the opening line of Avitus's poem recalls this very passage of Juvenal—a more prominent allusion can hardly be imagined. More intriguing, however, is the "program" outlined in the twelve verses that follow ("De mundi initio"):

*Quidquid agit varios humana in gente labores,*  
*unde brevem carpunt mortalia tempora vitam,*  
*vel quod polluti vitiantur origine mores,*  
*quos aliena<sup>46</sup> premunt priscorum facta parentum,*

<sup>44</sup> Cf. *Sat.* 1.94-95 ("quis totidem erexit villas, quis fercula septem / secreto cenavit avus? nunc sportula . . ."); 110-11 ("vincant divitiae, sacro ne cedat honori / nuper in hanc urbem pedibus qui venerat albis"); 149 ("omne in praecipiti vitium stetit").

<sup>45</sup> *Sat.* 1.158-71.

<sup>46</sup> I do not see how "aliena" can mean "insane" or "unnatural," as Nodde supposes it does (*Fall of Man*, 18 ad loc.). Avitus's point is abundantly clear: Adam's guilt (*aliena facta*) is inherited by us, but we add to it *nostra de parte*. Cf. Augustine, *De civitate Dei* 16.27 (p. 532.21-23): "si etiam parvuli . . . nascuntur non proprie, sed originaliter peccatores";

addatur quamquam nostra de parte reatus,  
 quod tamen amisso dudum peccatur honore,  
*adscribam tibi*, prime pater, qui semine mortis  
 tollis succiduae vitalia germina proli.  
 Et licet hoc totum Christus persolverit in se,  
 contraxit quantum percussa in stirpe propago:  
 attamen auctoris vitio, qui debita leti  
 instituit morbosque suis ac funera misit,  
 vivit peccati moribunda in carne cicatrix (1.1-13).

Once again the similarity of phrases conceals a contrast of ideas.<sup>47</sup> Avitus's story concerns the Sin that has existed from the *very beginning* of human history. Things will change only when Paradise is restored ("De originali peccato"):

Cessabit gemitus, luxus, metus, *ira*, *voluptas*,  
 fraus, dolor atque dolus, maeror, discordia, livor.  
 Nullus egens, nullus cupiens, sed pace sub una  
 sufficiet cunctis sanctorum gloria Christus (31-34).

Avitus knows, and makes good use of, his Juvenal. Just as the satirist is ironically made to herald the central theme of *De spiritalis historiae gestis* as stated in its prologue, so too he is made to usher in the actual narrative of the Fall.<sup>48</sup>

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Avitus, 275: "*propriae iam mens sibi conscia culpa*"; 4.151-52: "Non contenta suo foedari vita parente / adfectat mortem *propria virtute* mereri."

<sup>47</sup> The parallel was overlooked by A. Schippers, *Avitus: De mundi initio* (Amsterdam, 1945), 44 ad loc. 1.

<sup>48</sup> I would like to thank Prof. J. E. G. Zetzel and an anonymous reader for their comments.



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